Attention

For customers in the U.S.A.

DIGITAL STILL CAMERA PDR-3300

Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

数码说明书之家
2005.09.08
www.54gg.com

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Change the direction of the radio or TV antenna.
  Move the equipment or the radio or TV. For example, if the equipment is to the right of the TV, move it to the left of the TV.
  Or, move the equipment farther away from the radio or TV.
- Plug the equipment into a different outlet. Don't plug your radio or TV into the same circuit as your equipment.
- Ensure that all expansion slots (on the back or side of the equipment) are covered.
  Also, ensure that all metal retaining brackets are tightly attached to the equipment.
- If these suggestions don't help, consult your equipment dealer or experienced radio/TV technician for help.

CAUTION

If you modify the camera in any way, without getting approval from Toshiba Corporation, your camera may violate FCC regulations. Violation of FCC regulations may cause the FCC to void your right to use the modified camera.

TOSHIBA AMERICA INFORMATION SYSTEMS, INC.

Imaging Systems Division
9740 Irvine Boulevard,
Irvine, California 92618-1697
Phone Number: (800)288-1354

For customers in Canada

CAUTION

This Class B digital apparatus complies with Canadian ICES-003.

Before Reading This Manual

Thank you for purchasing the Toshiba PDR-3300 Digital Still Camera.
To ensure that you use this camera safely and correctly, read this Instruction Manual carefully before you start using the camera. Once you have finished reading this Instruction Manual, keep it handy at all times.

Trademark Information

- **Macintosh** and are trademarks of Apple Computer, Inc.
- **ACDSee** is trademark of ACD Systems.
- **MS-DOS** and **Windows** are registered trademarks of the Microsoft Corporation of the U.S. registered in the USA and other countries.
- **Windows** is an abbreviated term referring to the Microsoft Windows Operating System.
- **SD** is a trademark .

- Other companies or product names are trademarks or registered trademarks of the respective companies.

Conventions Used In This Manual

IMPORTANT

- Indicates items or details that you should observe to prevent loss of data, malfunction and impaired performance. Also indicates information relating to specifications and functions.

MEMO

- Indicates extra useful information.

☞ Indicates another page to refer to for extra information.

Safety Precautions

Read these safety precautions carefully before using the PDR-3300. These instructions contain valuable information on safe and proper use that will prevent harm and damage to the operator and other persons. Make sure that you fully understand the following details (indications) before proceeding to the main descriptions in this manual.

Indication definitions

Indication	Meaning
⚠DANGER	To indicate there will be an immediate hazard to one's life or severe bodily injury, if the safety instruction is not carefully observed.
⚠WARNING	To make aware in advance of actual or potential harm and danger that could result in bodily injury, if the safety instruction is not careful observed.
⚠CAUTION	To notify and warn about the potential harm that could result in bodily injury or property damage, if the safety instruction is not carefully observed.

*1: "Bodily injury" means minor injuries, burns or shock which does not require hospitalization or probably require to seek for First Aid solution.

*2: "Property damage" means possible threat and harm to home, household appliances, utilities, pets; and indefinitely, it may cause one's financial loss.

Graphic symbol definitions

Graphic symbol	Meaning
	Indicates a prohibited action that must not be carried out. The actual prohibited action is indicated in the symbol or nearby graphically or described in text.
	Indicates a necessary action that must be carried out. The actual necessary action is indicated in the symbol or nearby graphically or described in text.

Exemption Clauses

- Toshiba Corporation bears no responsibility in the case of damages arising from earthquakes, fire not liable to Toshiba Corporation, operating by third parties, other accidents, or use under abnormal conditions including erroneous or improper operation and other problems.
- Toshiba Corporation bears no responsibility for incidental damages (lost profit, work interruption, corruption or loss of the memory contents, etc.) arising from the use of or the inability to use this unit.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from not having followed the descriptions in this Instruction Manual.
- Toshiba Corporation accepts no liability whatsoever for any damages arising from malfunctions arising from combination with equipment or software that is not related to Toshiba Corporation.

⚠ DANGER

Do not heat, disassemble or throw the batteries into fire or water.

Doing might cause them to rupture, ignite or heat up, resulting in fire or major injury.

Do not strike the batteries with a hammer, or step on, drop or subject the batteries to strong impact.

Doing so might cause them to rupture, ignite or heat up, resulting in fire or major injury.

Use the batteries only for its originally intended purpose.

Using the batteries for any other purpose might cause it to rupture, ignite or heat up, resulting in fire or major injury.

⚠ WARNING

Should you ever notice smoke, a strange odor or excessive heat coming from the camera, immediately turn OFF the power and remove the batteries and AC adapter.

Continued use in this state might cause fire, electric shock or burns. For details on repair, consult the store of purchase, or please contact the technical support number.

If foreign objects or water have entered the camera, immediately turn the power OFF and remove the batteries and AC adapter.

Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.

If the camera has fallen or its case is damaged, immediately turn the power OFF and remove the batteries and AC adapter.

Continued use in this state might cause fire or electric shock. For details on repair, consult the store of purchase, or please contact the technical support number.

⚠ WARNING (continued)

Do not place the camera on inclined or unstable surfaces.

This might cause the camera to fall or tilt over.

Do not use in areas near water.

This might cause fire or electric shock. Take special care during rain, snow, on the beach or near the shore.

Do not use the camera in the bath or shower.

This might cause a fire or electric shock.

Do not allow metallic objects or other flammable foreign matter inside the camera.

This might cause a fire or electric shock. Do not open the SD Memory Card cover, and insert or allow such objects to fall inside.

2005.09.08
www.54gg.com

⚠ WARNING (continued)

Do not disassemble, change or repair the camera.

This might cause fire or electric shock. For details on repair and internal inspection, consult the store of purchase, or please contact the technical support number.

Do not touch power or TV antenna cords during a thunderstorm.

This might cause electric shock.

Do not use the camera while you are walking, driving or riding a motorcycle.

This might cause you to fall over or result in a traffic accident.

Use only the specified batteries or the specified AC adapter.

Use of a battery or AC adapter other than specified, might cause fire, defects or malfunctions.

⚠ WARNING (continued)

Keep the batteries out of the reach of children.

If a child swallows a battery, this might result in poisoning. If a child swallows a battery, immediately consult a physician.

If battery fluid enters the eyes, immediately rinse with fresh water and consult with a physician to receive treatment.

If left untreated, damage to the eye could be permanent.

Use the AC adapter only with the indicated power supply voltage (USA: 100-120V, Europe: 230V AC)

Use with any other power supply voltage might cause fire or electric shock.

⚠ CAUTION

If you want to use the camera on an airplane, consult with the airline and follow their instructions.

Use of this camera is sometimes restricted due to potential radio interference.

Do not use the camera in humid, steamy, smoky or dusty places.

This might cause fire or electric shock.

Do not leave the camera in places where the temperature may rise significantly, such as inside a car.

This might adversely affect the case or the parts inside, resulting in fire.

Do not wrap the camera or place it in cloth or blankets.

This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.

⚠ CAUTION (continued)

Before you move the camera, disconnect cords and cables.

Failure to do this might damage cords and cables, resulting in fire or electric shock.

Do not drop or subject the camera to strong impact.

This might cause fire, electric shock or malfunctions.

Before you carry out maintenance on the camera, remove the battery and AC adapter.

Leaving these attached might cause electric shock.

Remove the batteries and AC adapter if you plan not to use the camera for a long time.

This might cause fire.

Insert the batteries paying careful attention to the polarity (+ or -) of the terminals.

Inserting the batteries with its polarities inverted might cause fire and injury, or damage the surrounding areas.

⚠ CAUTION (continued)

Do not charge the supplied batteries.

Doing so might cause them to rupture, ignite or heat up, resulting in fire or major injury.

Do not leave dead or exhausted batteries in the camera.

Doing so might cause them to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.

Do not use different types of batteries together, or mix old and new batteries.

Doing so might cause them to rupture, ignite or heat up, resulting in fire or major injury or damaging the camera.

Do not walk around with the camera swinging from the shoulder strap.

If you walk around with the camera hanging from your hand through the shoulder strap, the camera might come into contact to other people and cause injury, or damage to the camera or other objects.

⚠ CAUTION (continued)

Do not look at the sun through the camera viewfinder.

This may cause injury of the eyes.

Do not use the flash close to anyone's eyes.

This might cause damage to the person's eyesight.

Do not subject the LCD monitor to impact.

If the LCD monitor is impacted, the glass on the screen may be broken and internal fluid may leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, immediately rinse with fresh water. If the internal fluid enters your eyes, immediately consult a physician to receive treatment.

Consult your dealer regarding the internal cleaning of the camera once every two years.

If dust is allowed to accumulate inside the camera for a long time, this might result in fire or defects. Consult your dealer regarding the cleaning costs.

Notes On Handling Your Camera

When you use your camera, carefully read and strictly observe the Safety Precautions from page 4 onwards and the notes described below.

●Avoid using or storing the camera in the following places:

- ◎ Places subject to humidity, dust and dirt
- ◎ Places subject to direct sunlight
- ◎ Places subject to high or low temperature
- ◎ Places filled with highly flammable gas
- ◎ Places near gasoline, benzene or paint thinner
- ◎ Places subject to strong vibrations
- ◎ Places subject to smoke or steam
- ◎ Places subject to strong magnetic fields (such as electric motors, transformers or magnets)
- ◎ Places contacting chemicals such as pesticides or next to rubber or vinyl products for long periods

●Do not expose the camera to sand or dust.

The PDR-3300 is particularly sensitive to sand and dust. If the camera comes into contact with sand or dust, not only will the camera become damaged, it will also no longer be repairable.
Pay special attention when using the camera at the beach or where sand or dust is likely to be present.

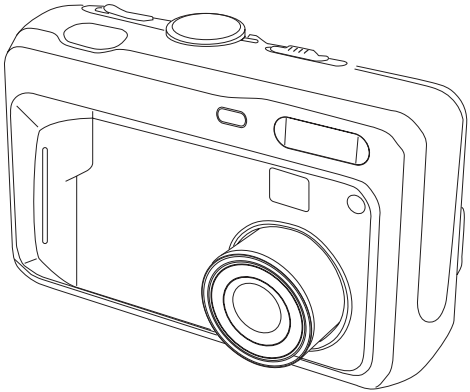
● Notes On Condensation

Due to a sudden change in temperature, such as when you move the camera from a cold location to a warm one, water droplets (condensation) may form on the inside of the camera or on the lens. When this occurs, switch the camera OFF, and wait an hour before using the camera. Condensation may also form on the SD Memory Card. If this happens, remove the SD Memory Card, wipe off any condensation and wait a short time before using it again.

● Carrying Out Maintenance on Your Camera

◎ To prevent the lens, surface of the LCD monitor or viewfinder from being scratched, blow off any dust from these parts with a blower brush and lightly wipe with a soft dry cloth.

◎ Clean the body of the camera with a soft dry cloth. Do not use volatile liquids such as paint thinner, benzene or insecticide, as these may react with the camera body and cause deformation or remove the coating.



Notes On Batteries

◎To extend the use of the camera, we strongly recommend that you only use the following types of batteries:
- Nickel Metal Hydride [NiMh] (Extended Life, Rechargeable)
- Lithium (Extended Life, Not Rechargeable)

◎Battery performance in general (especially Alkaline) may vary depending on individual brand, length of storage since manufacture, temperature, and operating mode of the digital camera, such as play back using LCD and strobe. Low temperatures (50 degrees Fahrenheit/10 degrees Celsius or below) can also affect the performance of the battery and decrease the number of pictures taken when compared to picture taking in warmer conditions.

◎The supplied Alkaline batteries are only for operation check when you buy your camera, so the battery life may be short.

◎The use of manganese type batteries is not suitable for this product due to the low number of pictures that can be taken with this type of battery.

◎When the camera is not in use for an extended period, please remove the batteries from the camera to extend battery life, and to prevent damage such as battery leakage. (Once the batteries have been removed from the camera, you will need to re-set the date and time within the SETUP MENU.)

Notes On Handling Batteries

⚠WARNING

When you use the battery, carefully read and strictly observe the warnings and cautions indicated on the battery.

Failure to do this might cause battery to rupture, ignite or heat up, resulting in fire, major injury or damaging the camera.

■ About Battery Use

- ◎ Do not use batteries other than that specified.
- ◎ Do not insert batteries in the wrong direction.
- ◎ Do not charge, heat, open, or short-circuit the batteries. Do not throw batteries into fire.
- ◎ Do not charge the supplied batteries.
- ◎ When using rechargeable batteries, follow the instructions for the batteries and the charger for safe handling. (This camera can not charge the rechargeable batteries.)
- ◎ Do not leave dead or exhausted batteries in the camera.
- ◎ Do not use different types of batteries together, or mix old and new batteries.
- ◎ Do not remove the batteries immediately after a prolonged use of the camera, as they may have become heated.

Neglecting the above may cause battery leakage and corrosion, resulting in burns or injury.
If your fingers or clothes come into contact with the battery acid, wash them immediately. If your eyes come in contact with battery acid, wash them and immediately consult your doctor.

Notes On Handling the AC Adapter

Be sure to use only the specified AC adapter (PDR-AC20A for the US/Canada, PDR-AC20E for Europe, PDR-AC20U for the UK) (sold separately). Using a different AC adapter might cause the camera to malfunction.
When you use the AC adapter, carefully read and strictly observe the Safety Precautions from page 8 onwards and the notes described below.

- Be sure that you do not allow the AC adapter to contact any other metal object as this might cause a short circuit.
- To connect the AC adapter, firmly insert the plug on the end of the cable into the DC IN 5V terminal. Do not insert the plug into other terminals. This might cause the camera to malfunction.
- Before you disconnect the connector cable, turn the camera OFF and then disconnect the cable holding it by its plug. Do not disconnect the connector cable by pulling the actual cable.
- Do not drop the AC adapter or subject it to strong impacts.
- Do not use the AC adapter in very hot and humid locations.
- Do not plug in the AC adapter while you are using the battery. Switch the camera OFF first.
- The AC adapter is for indoor use only.
- Use only the specified AC adapter. Do not use other AC adapters.
- The AC adapter may sometimes become warm during use. This is normal and not a malfunction.
- Buzzing or whirring noises may come from inside the camera. This is normal and not a malfunction.
- Do not use the AC adapter near a radio as it could interfere with radio signal reception.
- If you remove the battery or AC adapter while the camera is in operation, the date may be lost from memory. If this happens, reset the date.

The Function Map

There are various ways you can take photographs on the PDR-3300, by using the settings provided by the camera itself or by adjusting the settings to suit your particular photographic requirements.
In addition to photographic functions, the PDR-3300 is provided with other handy functions. We suggest that you look at the function map below before you start using the PDR-3300.

Read these pages first
Let's get ready to use PDR-3300.

Let's learn about basic operation
- Turning the Power ON
- Photography
- Playing back photography images
- Erasing Images

Taking Photographs
STEP 1 – Taking photography
STEP 2 – Leaving camera setting up to your camera
- ◎The camera automatically adjusts the focus and exposure settings.
- ◎Taking Portrait Shots
- ◎Taking Landscape Shots
- ◎Taking Shots of Portraits at Night
- ◎Taking Continuous Shots of Moving Objects

STEP 3 – Utilizing the various photography modes
- ◎Zoom Photography
- ◎Focus Photography
- ◎Photography Using the Self-timer
- ◎Photography Using the Flash
- ◎Making movies

STEP 4 – Setting the modes in more detail to make your photographs turn out more as you intended
- ◎Setting Image Size and Quality
- ◎Taking Shots with the Priority Given to Aperture
- ◎Taking Shots with the Priority Given to Shutter Speed
- ◎Extended Exposure Photography
- ◎Compensation Exposure
- ◎Automatic Exposure Bracketing (AEB Photography)
- ◎Taking Photos Continuously
- ◎Setting White Balance

Playing back your photographed images
STEP 1 – Let's playback some images
STEP 2 – Selecting the various ways to play back images
- ◎Playing back movies
- ◎Enlarging Photographed Images
- ◎Auto Playback
- ◎Simple Movie Playback
- ◎Displaying Detailed Information of Images

Erasing images
STEP 1 – Erasing Images
STEP 2 – Other ways to erase images
- ◎Erasing All Images in a Folder
- ◎Erasing All Images Folders
- ◎Formatting SD Memory Card

Setting the basic camera settings

- Setting the Date and Time
- Formatting SD Memory Card
- Adjusting the LCD Monitor Brightness
- Switching LCD Monitor Display
- Turning the LCD Monitor Display OFF
- Turning the Beep OFF
- Setting the Color of Images(Color/Black and White/Sepia)
- Changing the Power OFF Time
- Changing the LCD Monitor Display Language

You can also do this

-The PDR-3300 also has lots of other features-

- Protecting Images
- Changing the size of Images
- Compressing Images
- Print Information
- Displaying Detailed Information of Images
- Switching LCD Monitor Display
- Taking and Playing Back Photographs on a TV

数码说明书之家
2005.09.08
www.54sgs.com

Loading images on a personal computer

Loading images on a personal computer, separate “Software Manual”

Contents

Contents The name in parentheses ( ) is the function name on the PDR-3300 Preface

Preface

◎Attention 1
◎Before Reading This Manual 3
◎Safety Precautions 4
Indication definitions 4
Graphic symbol definitions 4
Exemption Clauses 4
◎Using Your Camera Correctly 10
Notes On Handling Your Camera 10
Notes On Batteries 12
Notes On Handling Batteries 13
Notes On Handling the AC Adapter 14
◎The Function Map 15
◎Contents 18

Getting Ready

◎Accessories 21
◎Names of Parts 22
◎Attaching the Shoulder Strap 25
◎Installing the Batteries 26
Loading the Batteries 26
Removing the Batteries 27
Battery Wear 28
◎Using the Power Outlet 29
◎About SD Memory Card 31
Notes on SD Memory Card 31
Loading SD Memory Card 32
Removing SD Memory Card 33
Write Protection 35
◎Turning the Power On/Off 36
Turning the Power On 36
Turning the Power Off 36
◎LCD Monitor Display 37
In [📷] mode 37
In [MF 📷] mode 38
In [🎬] mode 39
In [▶] mode 40

Taking Photographs

◎How to Hold Your Camera 41
◎How to Press the Shutter Button 42
◎Photography (Auto Photography) 44
Using the Viewfinder 44
Using the LCD Monitor 45
◎Setting the Image Size and Quality 47
◎Taking Photographs in [📷] Mode (Auto Select mode) 50
◎Taking Photographs in a Variety of Modes ([SCENE] Mode) 51
[🏠] Automatically adjusts the focus and exposure settings 53
[👤] Portrait 53
[▲] Landscape 53
[🏃] Sports 54
[👤★] Night 54
[▦] 16-frame multi 55
◎Zoom Photography 56
◎Macro Photography 58
◎Self-timer Photography 59
◎Photography Using the Flash 60

◎Manual Settings 62
Exposure control (EXP.) 64
White Balance (W.B.) 64
Metering system (A.E.) 65
Single, continuous or AEB photography mode (S/C) 65
◎Focus Mode 67
◎Photography in the Program Mode 68
◎Photography in the Aperture-priority Mode 69
◎Photography in the Shutter Speed-priority Mode 71
◎Photography in the Full Manual Mode 73
◎Extended Exposure Photography(Bulb Photography) 74
◎Exposure Compensation 75
◎Taking Shots with the Automatic Exposure Bracketing (AEB Photography) 77
◎Taking Photographs Continuously (Burst Photography) 78
◎Making Movies 81
◎Changing the Preset Conditions (RECORDING MENU) 83
PREVIEW 84
COLOR 84
ISO 85
SHARPNESS 86
CONTRAST 86
DIGITAL ZOOM 86
LCD (✳) 86
QUALITY 87

Playing Back Images

◎Playing Back Photographed Images (Single-Frame Playback) 88
◎Playing Back Movies 89
◎Displaying a List of Images (Thumbnail Display) 91
◎Enlarging Photographed Images (Zoom Playback) 92
◎Auto Playback (Slideshow) 93
◎Playback of Multi Image Pictures 94

Erasing Images

◎Erasing Images (Erase Frame) 95
◎Erasing Folders (All Images in a Folder/All Folders) 97
◎Formatting the SD Memory Card 99

Handy Functions

◎Reducing the Image Size(Resize) 100
◎Compressing Images(Quality) 102
◎Print Information 104
◎Protecting Images 108
Protecting an Image 108
Removing the Protection 110

Other applications

◎Basic Settings (🔧 mode) 111
AUTO POWER OFF 112
SOUND 112
TIME & DATE 113
OSD LANGUAGE 113
VIDEO OUT 114
QUALITY 114
FRAME NUMBER 115
SYSTEM INFO 115
◎Adjusting the LCD Monitor Brightness 116
◎DISP Button and LCD Monitor Display (In Playback Mode) 117

◎DISP Button and LCD Monitor Display (In Photography Mode) 118
◎Taking and Playing Back Photographs on a TV 119
◎Transferring Images to a PC 120
◎Separately Sold Accessories 121
◎Connecting to Other Devices..... 122
◎Definitions of the Color of the Viewfinder LED 123
◎Self-timer LED..... 124
◎IR Remote Controller..... 124

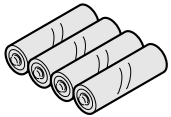
Erasing Images

◎Specifications 125
◎Warnings and Messages Displayed on LCD Monitor..... 129
◎Troubleshooting 131
◎Glossary 132

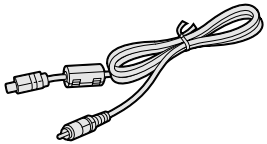
Accessories

Make sure that you have all of the items below before you start using your camera.

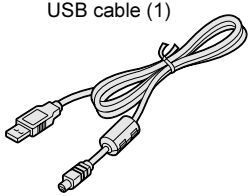
Alkaline batteries (4) (size AA)



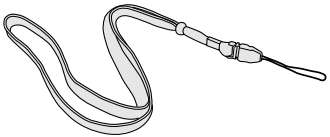
Video cable (1)



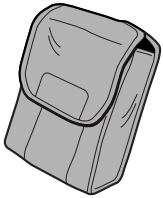
USB cable (1)



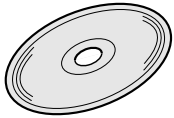
Shoulder strap (1)



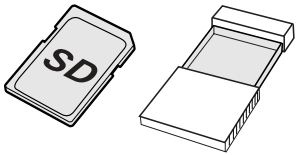
Camera case (1)



Software application (1)
(CD-ROM)

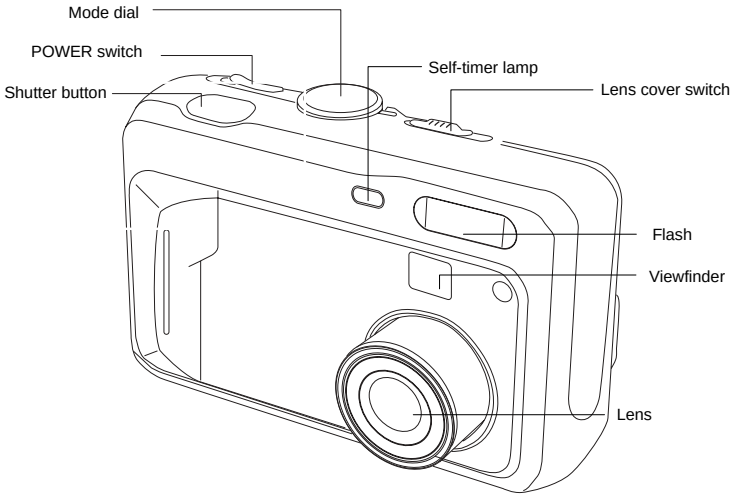


- SD Memory Card (8MB) (1)
- SD Memory Card case (1)

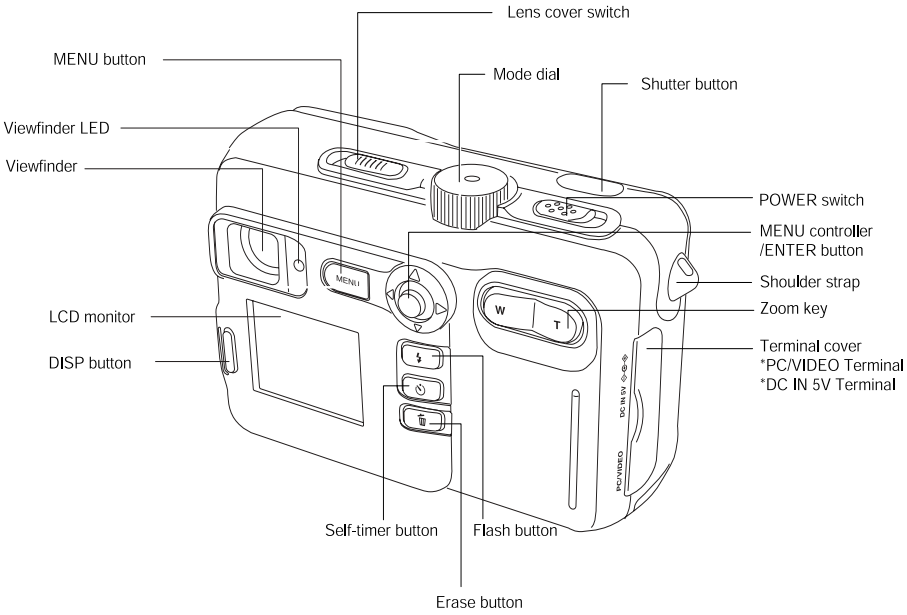


- Instruction Manual (this manual)
- Software Manual

Names of Parts



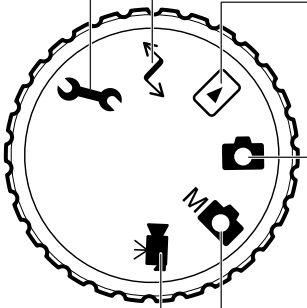
Names of Parts (continued)



Mode dial

SET-UP mode
Sets basic camera settings (AUTO POWER OFF, SOUND, TIME & DATE, OSD LANGUAGE, VIDEO OUT, QUALITY, FRAME NUMBER ,SYSTEM INFO.)

PC mode
Transfers images to a PC.
For details, refer to the Software Manual.



Playback mode
In this mode, you can select image playback, size change, compression, protect mode, and writing of development (printing) information.

Auto Photography mode
This mode enables automatic photography in accordance with the photographic conditions. In this mode, the exposure (combination of shutter speed and aperture) is automatically controlled to facilitate photography.

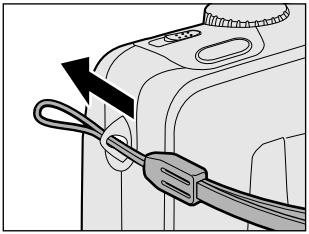
Movie mode
Takes short Movies for playback on camera or computer.

Manual Photography mode
Manually sets white balance, exposure, aperture value, shutter speed and AE (auto-exposure) position.

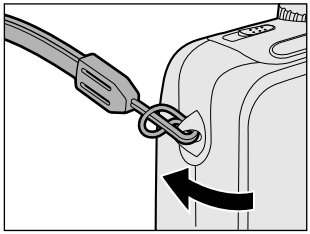
Attaching the Shoulder Strap

This shoulder strap is handy for carrying your camera around.
To prevent your camera from dropping during photography, hang the shoulder strap around your neck.

1 Pass the end of the shoulder strap through the strap attachment on the camera.



2 Pass the shoulder strap through the loop and pull.



IMPORTANT

◎When the camera is not in use, be sure to close the lens by sliding the lens cover switch to close position. Turn off the power to retract the lens unit before closing the lens cover.

Installing the batteries

This camera uses four size AA batteries. For details on handling batteries, be sure to read page 12 .

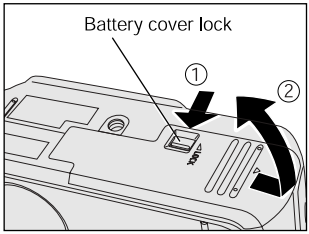
Loading the Batteries

IMPORTANT

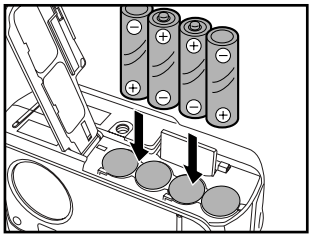
- Before you load or remove the batteries, be sure to turn the camera off.
- If the battery is loaded or removed with the power on, the date setting may return to its default or the camera settings may be reset.
- The camera may not start normally if you load batteries not on the power off status. In this case, turn off, then turn on again.

1 Unlock the battery cover lock ① .

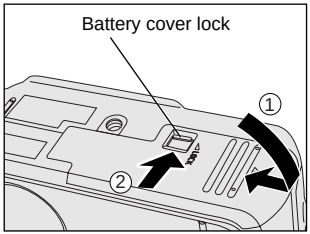
2 Pull open the battery door in the direction of the open arrow ②.



3 Load batteries in the battery compartment. Make sure they are loaded in their polarity as shown inside the battery compartment.



4 Close the battery door ① and move the battery cover lock switch in the direction of the Lock arrow ② . Make sure that the battery cover is firmly closed.



Note:
If " CARD COVER LOCK IS RELEASED" message popped out on the LCD monitor, please check the battery cover lock switch. Make sure it is locked in the direction of the Lock arrow.

Removing the Batteries

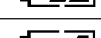
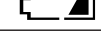
Reverse the procedure for "Loading the Batteries" and remove the batteries .

IMPORTANT

When removing the batteries, take care not to drop the camera of the batteries by mistake.

Battery Wear

When the power is ON, the remaining battery power is displayed on the LCD monitor.

LCD Monitor	Remaining Battery Power
	[FULL] Sufficient battery power, or the AC adapter is connected
	[HALF] Half battery power or less
	[LITTLE] Little battery power left
	[EMPTY] No battery power left. Replace with new batteries

MEMO

- When you use the camera for the first time or if you have left the camera for a long time without the battery loaded, set the date.
- If the batteries are exhausted and need replacement, do not connect the AC adapter. It may cause an incorrect display of remaining battery power.
- Battery power measure is based on amount of power required for camera LCD, flash, photography and playback.
- **About the battery duration time**

The following shows the number of frames/time capable of continuous photographing and playback on condition of using new alkaline batteries.
The battery duration time may vary depending on environmental temperature, image size, image quality or using frequency of zoom.
In photography mode (using strobe every time in a normal temperature)
When LCD monitor is ON ..... approx**(WAIT FOR TOSHIBA)**frames
When LCD monitor is OFF ..... approx. **(WAIT FOR TOSHIBA)**frames
In playback mode (slideshow continuous playback time)….approx. 110 min.

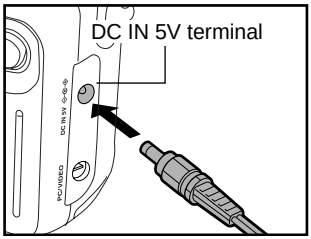
Using the Power Outlet

If you use the AC adapter in a room with a power outlet, you can take photographs for an extended period of time. This also prevents failed photographs due to battery wear or failed transfer of data to a PC. For details on handling the AC adapter, be sure to read page 14.

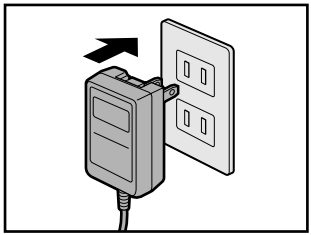
IMPORTANT

- Before you connect or disconnect the AC adapter, be sure to turn the camera off. If the AC adapter is connected or disconnected with the power ON, the camera may malfunction or recorded data may be erased (destroyed) even if the batteries are loaded.
- The camera may not start normally if you load batteries not on the power off status. In this case, slide the Power knob to turn off the power, then turn on again.

1 Insert the AC adapter connector plug into the DC IN 5V terminal on the camera.



2 Insert the AC adapter power plug into the power outlet.



MEMO

- When the AC adapter is connected after the batteries have been installed, the camera lens unit automatically retracts and the power turns off. Please turn on the power again to resume operation.
- Batteries can be installed while the AC adapter is connected. However, if the AC adapter is disconnected after the batteries have been loaded, the camera power is automatically turned off but the lens will remain extended. If this happens, please turn on the power to resume operation.

About SD Memory Card

SD Memory Card is a storage medium for saving images that you have photographed. Even if the camera's power is turn OFF, the images saved on the SD Memory Card are not erased. SD Memory Card can be repeated read and written.
SD Memory Card having the following storage capacity can be used on your camera:
8MB/16MB/32MB/64MB/128MB
You can also connect the PC card adapter to transfer images to a PC.

Notes on SD Memory Card

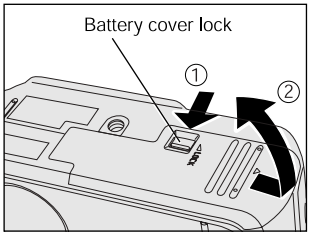
- Remove and insert SD Memory Card with the camera's power turned off.
- Recorded data may be erased (destroyed) in the situations listed below.
- When the SD Memory Card is used incorrectly by the user or a third party
- When the SD Memory Card is exposed to static electricity or electrical noise
- When the SD Memory Card is removed or the camera is then switched OFF during data recording, data erasing, frame advance when images are being played back or during formatting of the SD Memory Card.
- We recommend copying and saving important data onto another storage medium (floppy disk, harddisk, MO disk, etc.).
- Never remove the SD Memory Card or switch the camera OFF during data recording or during data erasing (SD Memory Card formatting). These actions might damage the SD Memory Card.
- Use only the SD Memory Card specified for use with the camera. The use of other SD Memory Card could damage the camera.
- SD Memory Card are precision electronic devices. Do not bend, drop, or subject SD Memory Card to excessive shocks. Also, do not carry SD Memory Card in locations such as a trouser pocket. This might subject the SD Memory Card to excessive force when you sit down, damaging the SD Memory Card.
- Do not use or store SD Memory Card in environments likely to be affected by strong static electricity or electrical noise.
- Do not use or store SD Memory Card in very hot, humid or corrosive environments.
- Take care not to touch the SD Memory Card's electrodes (metal contacts) or allow the electrodes to become soiled. Use a dry lint-free cloth to wipe away any dirt.
- To avoid damage caused by static electricity during transportation or storage, always use the special static-free case provided.
- If you are not using the camera for a long period of time, remove the SD Memory Card and store it in a safe place.

- Inserting a SD Memory Card that is charged with static electricity into your camera may cause it to malfunction. If this occurs, switch the camera OFF and then ON again.
- The SD Memory Card may feel warm when it is removed from the camera after the camera is used for a long time. This is normal and not a malfunction.
- The SD Memory Card has a limited service life. If images can no longer be written or erased, buy a new SD Memory Card.
- Use the index labels provided with the camera. If you attach a commercially available label, it may cause a malfunction when the SD Memory Card is loaded or removed.

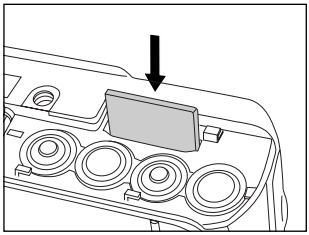
Loading SD Memory Card

1 Slide the POWER switch to OFF position, to turn the power off.

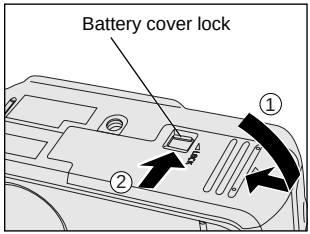
2 Unlock the battery cover lock switch.
Pull open the battery door in the direction of the open arrow.



3 Firmly insert the SD Memory Card as far as it can go with the SD Memory Card electrodes (metal contacts) facing the rear of the camera.



4 Close the battery door and move the battery cover lock switch in the direction of the Lock arrow. Make sure that the battery cover is firmly closed.



Note:

◎ If " CARD COVER LOCK IS RELEASED" message popped out on the LCD monitor, please check the battery cover lock switch. Make sure it is locked in the direction of the Lock arrow.

◎ Before you use the new SD Memory Card for the first time, be sure to format the SD Memory Card.

Removing SD Memory Card

IMPORTANT

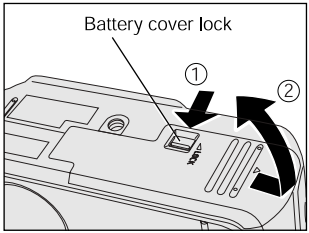
Never open the battery cover door or remove the SD Memory Card while data is being recorded to the SD Memory Card (viewfinder LED flashes). This might damage the SD Memory Card or corrupt the data on the SD Memory Card.

1 Slide the POWER switch to OFF position, to turn the power off.

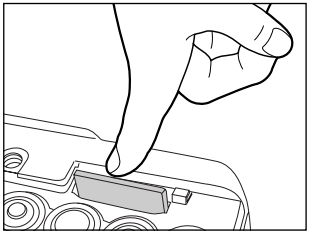
MEMO

If "LENS COVER" message popped out and the viewfinder lamp flashes (red) rapidly, please check the lens cover switch. Slide the lens cover switch towards ◖ to open the lens cover, and the camera will operate normally.

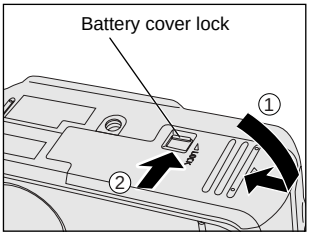
2 Unlock the battery cover lock switch.
Pull open the battery door in the direction of the open arrow.



3 Push the SD Memory Card in as far as it can go, and pull it out with your fingers.
If you push SD Memory Card once in as far as it can go, it will protrude slightly. Pull it out with your fingers.

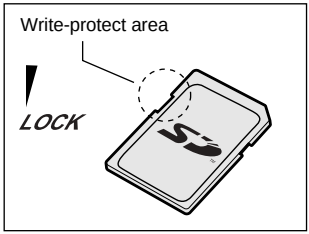


4 Close the battery door and move the battery cover lock switch in the direction of the Lock arrow. Make sure that the battery cover is firmly closed.



Write Protection

To prevent valuable data from being erased, move the write-protect knob to the lock arrow direction on the SD Memory Card. Data can no longer be recorded or erased from SD Memory Card. To write or erase data from SD Memory Card, unlock the write-protect knob to unlock direction.



IMPORTANT

The write protection may not function if the write-protect lock is malfunction.

Turning the Power On/Off

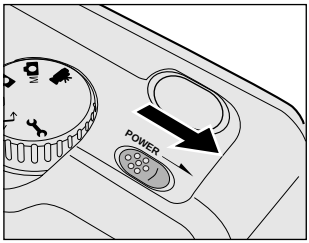
IMPORTANT

If no operation is carried out for a fixed amount of time (default: 1 minute), the power is turned off to prevent battery wear. This is called “Auto Power OFF”

Turning the Power ON

1 Make sure that the SD Memory Card is correctly loaded.
Slide the lens cover switch toward open direction ◖ .

2 Slide the POWER switch to ON position, to turn on the power.
When the camera is turned on, set the mode dial to the desired mode.
In the photography modes (📷 , M📷 or 🎥),
the lens extends from the camera body.
When the camera is turned ON, the Auto Power OFF function starts to work.



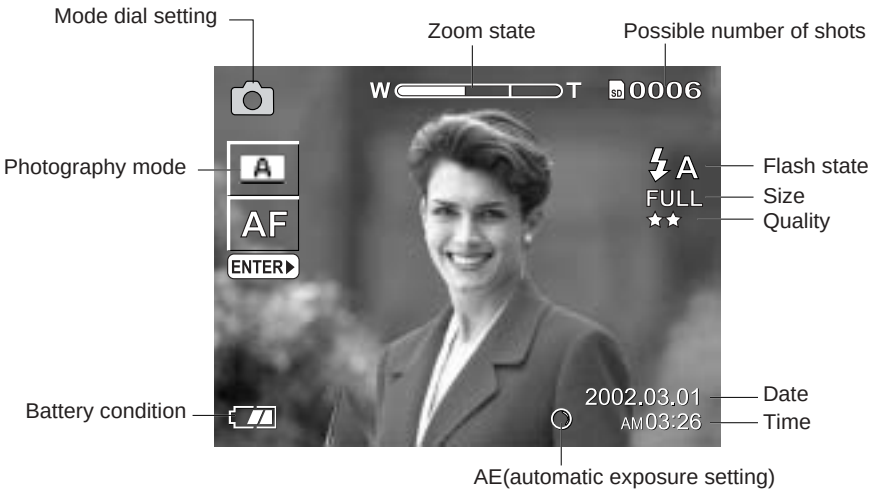
Turning the Power OFF

1 Slide the POWER switch to OFF position, to turn off the power.
The power is turned off, and the lens returns to its original position in the body.
Close the lens by sliding the lens cover switch to close position ◗ .

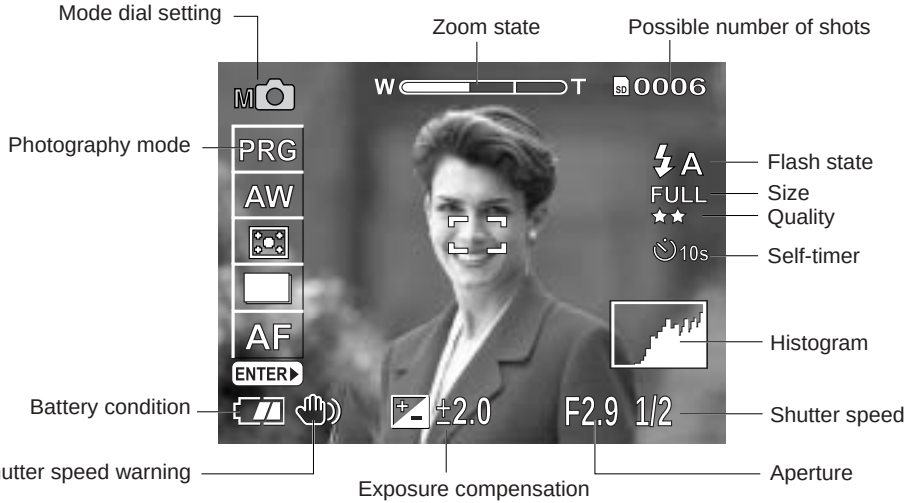
LCD Monitor Display

The text, numbers and icons that are displayed on the LCD monitor vary according to the current settings.
The LCD monitor automatically turns ON if necessary even if it is set to OFF.

In [ ] Mode



In [M] Mode



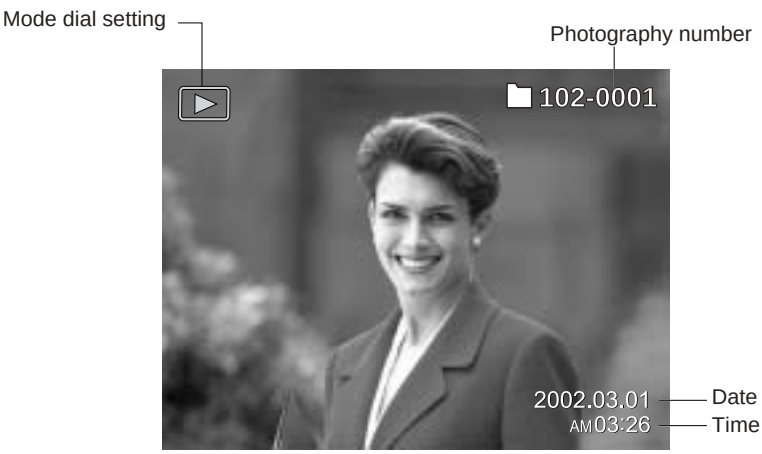
Histogram:
A histogram is a graphic representation of the tones of the subject. The horizontal axis of the histogram shows the brightness (increasing brightness from left to right) and the vertical axis shows the number of pixels at each brightness level.

In [ ] Mode

MEMO

- The size of the data to be recorded varies according to the amount of detail in the subject image. So, the number of images that can be photographed after an image is recorded sometimes does not decrease.
- The display is momentarily disrupted after recording an image or the mode is switched. This does not affect photography.

In [▶] Mode

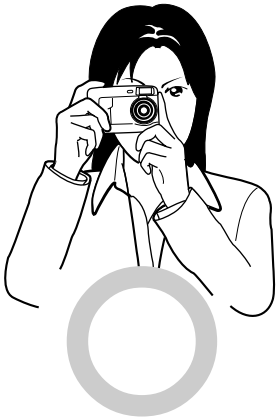

Mode dial setting
Photography number
102-0001
2002.03.01
AM03:26
Date
Time

How to Hold Your Camera

When taking a photograph, hold the camera firmly and prevent your finger or shoulder strap from covering the lens, flash or flash sensor.

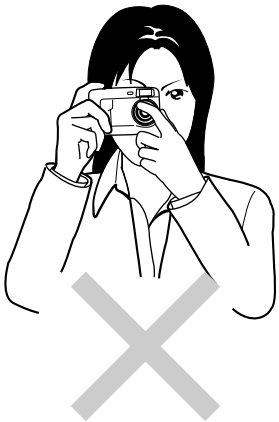
Right

Camera held with both hands with your arms firmly held against the sides of your chest



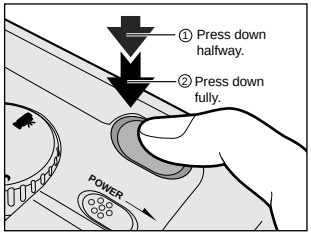
Wrong

Fingers held over the lens



How to Press the Shutter Button

The shutter button can be pressed down in two stages: half way down and fully down. When pressed half way down, AF (auto-focus) and AE (auto exposure) are carried out. When pressed fully down, the camera takes a picture.



1 **Press the shutter button down half way ① .**
AF (auto-focus) and AE (auto exposure) start to function.
When AF or AE are locked, the beep tone sounds and the viewfinder LED lights (turns green).

2 **Press and hold the shutter button down fully ② .**
The camera takes a picture.
The viewfinder LED flashes while image data is being recorded onto the SD Memory Card.

IMPORTANT

Never open the battery door or remove the SD Memory Card while an image is being recorded. This may corrupt the data on the SD Memory Card or damage the SD Memory Card itself.

- The image in the LCD monitor sometimes darkens from the time that the shutter button is pressed down halfway until the image becomes focused.
- To set the focus or exposure for a subject outside the center of the intended image, point the camera directly at the subject or desired exposure (lighting), press and hold the shutter button halfway. Now, with the shutter button still held halfway down, you can turn the direction of the camera and frame your image with the focus and exposure locked. Press the shutter button down fully to complete capturing of the image.
- Moving the camera as you press the shutter button will result in a blurred image.
- The PDR-3300 uses an accurate auto focus mechanism. However, the PDR-3300 may have difficulty focusing or not be able to focus at all for subjects and situations such as the following:
  - When the subject is distant and dark
  - When there are objects in front of or behind the subject (such as an animal in a cage or a person in front of a tree)
  - Subjects with little reflection, such as hair or fur

- Subjects with no solidity, such as smoke or flames
- Subjects viewed through glass
- Subjects moving at high speed
- Very shiny subjects such as a mirror or car body
- Extremely low contrast subjects
- Subjects that have low contrast and merge into the background (such as white walls or subjects dressed in the same color as the background)

• If the image cannot be focused, the focus is automatically fixed to infinity. (When the flash is necessary at this time, it is simultaneously fixed to illuminate objects 1.5 meters (five feet) away. During macro photography, the flash is aligned with the wide position.)

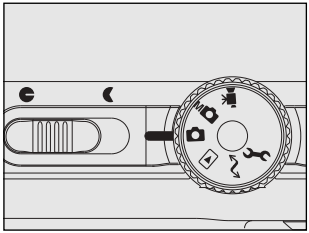
Photography (Auto Photography)

This is the most commonly used photography mode.
In this mode, exposure (combination of shutter speed and aperture) is automatically controlled to facilitate photography. There are two ways of taking photographs in this mode: using the viewfinder and using the LCD monitor.

Using the Viewfinder

1 Get ready to take the photograph.
Load the batteries and the SD Memory Card into the camera.

2 Slide the power switch to ON position, to turn on the power.
Slide the lens cover switch to open direction beforehand .

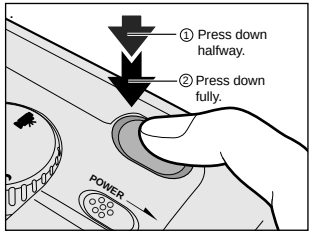


3 Set the mode dial to [ ].

4 Turn the LCD monitor OFF.
To reduce the amount of battery wear, we recommend turning the LCD monitor display OFF, and using the viewfinder to take photographs.

5 Look through the viewfinder to compose the picture.

6 Press the shutter button down half way ① , and press it down fully ②
- Pressing the shutter button down half way adjusts the exposure, and pressing the shutter button down fully takes the shot.
- When the focus and exposure are adjusted, the viewfinder lamp lights.
- If you shoot a picture, when preview is set to ON, a preview image is displayed on screen for about two seconds.
- The viewfinder LED flashes while image data is being recorded onto the SD Memory Card.



Using the LCD Monitor

1 Get ready to take the photograph.
Load the batteries and the SD Memory Card into the camera.

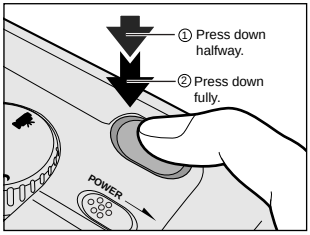
2 Slide the power switch to ON position, to turn on the power.
Slide the lens cover switch to open direction ◖ beforehand.

3 Set the mode dial to [📷].

4 Look at the image on the LCD monitor to compose the picture.

5 Press the shutter button down half way ① , and press it down fully ② .

- Pressing the shutter button down half way adjusts the exposure,and pressing the shutter button down fully takes the shot.
- When the focus and exposure are adjusted, the viewfinder lamp lights.
- If you shoot a picture, when preview is set to ON , a preview image is displayed on screen for about two seconds.
- The viewfinder LED flashes while image data is being recorded onto the SD Memory Card.



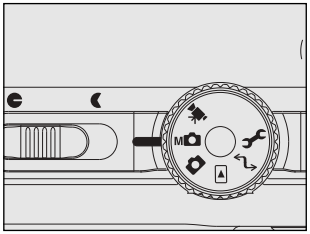
MEMO

- The LCD monitor sometimes displays bright, dark or colored spots at all times. This is not a malfunction. These spots do not appear in the photographed image.
- The image is not displayed on the LCD monitor while the shutter button is pressed down fully

Setting the Image Size and Quality

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed. Change the setting according to how the image is to be used and the remaining amount of space in the SD Memory Card.

In [ ],[M],or [ ] Mode



1. Press the Menu button.
2. Select Quality Menu, keep pressing ▲or▼ button until the QUALITY is highlighted.
3. After pressing the ▶ button while the QUALITY is highlighted, the LCD shows the QUALITY menu.
4. By pressing ▶ button, user can select size. The size item is reversely display in white. Press ▲or▼ to select the size setting user desired to set, and press ENTER button.
5. By pressing ▶ button during the size item is highlighted, the QUALITY item is reversely displayed in white. Press▲ or▼ to select the quality setting and press ENTER button.
6. To select another option, press ▲or ▼ button while still/movie/ok/ cancel is fully highlighted.
7. After pressing ENTER button while OK is highlighted, these combinations are set and the LCD monitor display returns to previous photography mode.
8. Resume to take the photography.

In [ ] Mode

1. SETUP MENU appears.
2. Select Quality Menu, keep pressing ▲or ▼ button until the QUALITY is highlighted.
3. After pressing the ▶ button while the QUALITY is highlighted, the LCD shows the QUALITY menu.
4. By pressing ▶ button, user can select size. The size item is reversely display in white. Press ▲or ▼ to select the size setting user desired to set, and press ENTER button.
5. By pressing ▶ button during the size item is highlighted, the QUALITY item is reversely displayed in white. Press ▲or ▼ to select the quality setting and press ENTER button.
6. To select another option, press ▲or ▼ button while still/movie/ok/ cancel is fully highlighted.
7. After pressing ENTER button while OK is highlighted, these combinations are set and the LCD monitor display returns to previous SETUP MENU.
8. Set the mode dial to [ ], [ ], or [ ] mode.
9. Take the photography.

MEMO

• To make the image smaller, it is more effective to reduce the size first and then reduce image quality.
• After you have taken a photograph, you can reduce its size and quality.
• The memory size of the image varies according to the subject.
• The compression ratio is given for reference only.
• In movie mode, the size setting cannot be set to SMALL.
• In the movie mode, the quality and size setting changes in the following order, regardless of the image quality setting.

Taking Photographs in [ ] Mode (Auto Select mode)

This mode enables automatic photography according to the photographic conditions. Photographs can be taken easily in this mode as the camera automatically makes the setting suitable to the conditions.
The Auto Select mode has the following options. Choose the option to suit the image you want to photograph.

... Automatically adjusts the focus and exposure settings.

.... Portrait shot

... Landscape shot

... Sports shot

... Night shot

.... 16 multi-photography shot

In the Auto Select mode, there are some settings that cannot be changed as the camera makes the settings automatically. These settings vary according to the mode.

- Focus photography

  ..... Can be set.

- Exposure compensation

  ..... Cannot be specified. (set automatically)

- About flash photography

  ..... Flash can be set as required in this mode.

  ..... Automatically fixed to red-eye auto.

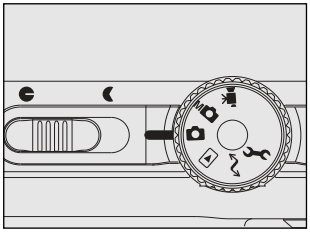
  ..... Automatically fixed to slow synchro.

  ..... Flash photography is not possible.

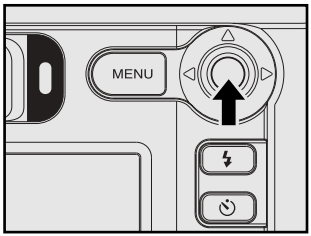
Taking Photographs in a Variety of Modes ([SCENE▸] Mode)

Set the appropriate scene mode from: [A] automatically adjusts the focus and exposure settings, [ ] portrait, [ ] landscape, [ ] sports, [ ] night, [ ] multi photography mode options.

1 Set the mode dial to [ ].



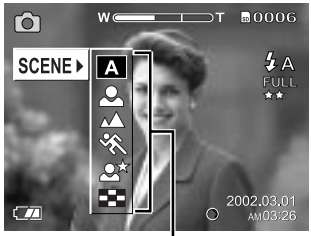
2 Press ENTER.
[SCENE▸] is displayed on the LCD monitor.



3 Press ▶ to display option menu, press ▲ or ▼ to select options and press ENTER.

Pressing ENTER selects the setting. To cancel, press ◀.

- [A] Automatically adjusts the focus and exposure settings
- [ ] Portrait
- [ ] Landscape
- [ ] Sports
- [ ] Night
- [ ] 16-frame multi



Options

4 Press ENTER.

The icon of the selected mode is displayed on the upper left side of the LCD monitor.
The camera is ready to take photographs.

5 Compose the picture, press the shutter button down halfway, and press it down fully.

The camera takes the picture.

MEMO

Optimum print effect for a selected scene is available by using a PRINT Image Matching compatible printer.

[ ] Automatically adjusts the focus and exposure settings

The camera automatically adjusts the focus and exposure settings to take photographs.

[ ] Portrait

Select this option to make people stand out with the background out-of-focus.

[ ] Landscape

Select this option to take photographs of distant scenery or landscapes.

[ ] Sports

Select this option to take photographs of fast-moving subjects.

[ ] Night

Select this option to take photographs of people against a dusk or night-time background.

MEMO

- When the Night mode is selected, the flash mode is fixed to Slow Synchro (the flash is fired at a slower shutter speed.)
- If you take a photograph with a dark background or at a dark place,the shutter speed slows down, and the slow shutter speed warning is displayed. (When the shutter is pressed halfway down, the viewfinder LED blinks green and the slow shutter speed mark [ ] is displayed in the LCD monitor.) To prevent distorted image, we recommend using a tripod to keep the camera stable.

[ ] 16-frame multi

This mode takes 16 shots continuously at 0.13 second intervals (7. 5 frames/second). The 16 photographed images are saved as one image (FULL size: 2048 x 1536 pixels).
This mode is effective for continuously photographing moving subjects.

Memo

- Though zoom playback is not possible, playback of multi image pictures is possible.
- Digital zoom photography is not possible.
- Photographs cannot be taken at HALF size or SMALL size. When HALF size or SMALL size is set before you select multi photography, the setting is automatically changed to FULL size. When multi photography is canceled, the setting returns to HALF size or SMALL size.

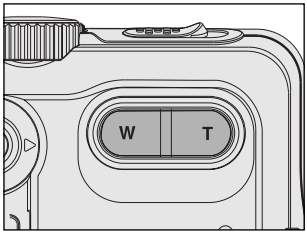
Zoom Photography

Zoom photography allows you to take zoom shots up to 2.8 times the size or wide-angle photography depending on the distance up to the subject. You can also enlarge the center of the screen and take photographs in the digital zoom mode with the focal distance increased by a factor of 2.2.

1 Set the mode dial to [📷] or [M📷].

2 Compose the picture using the Zoom key.

- Pressing the Zoom key towards the “T” zooms in on the subject, and enlarges the subject on the LCD monitor.
- Pressing the Zoom key towards the “W” provides a wider angle picture.
- The lens position moves according to the Zoom key setting.



Digital Zoom Photography

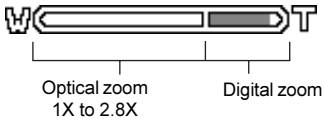
To set the digital zoom:

① Press the MENU button.
② Use ▲ or ▼ to select [DIGITAL ZOOM] and press ▶.
③ Use ▲ or ▼ to select [ON] and press ENTER.
④ Press the MENU button.
⑤ To activate digital zoom, press the Zoom key completely towards the "T" and hold it until the image on the LCD expands.

3 **Press the shutter button down halfway, and press it down fully.**

MEMO

- The digital zoom photography is canceled by pressing the DISP button to turn the LCD monitor off. On the LCD monitor display off status, the digital zoom photography is not possible as well.
- The digital zoom photography is not possible in the 16-frame multi mode.
- The Zoom switch setting is automatically canceled by either turning the camera OFF or by activation of the Auto Power OFF function.
- You can check the zoom status in the LCD monitor.



Macro Photography

The macro photography mode is used when the distance to the subject is between 10 cm at wide to infinity. In the macro photography mode, the LCD monitor automatically turns ON. Take the photograph while viewing the LCD monitor.

1. Set the mode dial to [📷] [M📷] or [🎥].
2. Press the ENTER button.
3. Press ▲ / ▼ button to select FOCUS on the LCD monitor
4. Press ▶ to display option menu, press ▲ or ▼ to Select Macro focus and press ENTER.

Set Value

[AF] Normal Focus

[🌷] Macro Focus

[1m] The camera will focus on subjects in a distance of 1m to take photos.

[3m] The camera will focus on subjects in a distance of 3m to take photos.

[∞] The camera will focus on subjects in a distance of ∞ to take photo.

5. Look at the image on the LCD monitor to compose the picture.
6. Press the shutter button halfway down, and press it down fully.

MEMO

- Macro photography is not canceled even if the camera is turned off or the Auto Power OFF function is activated.
- Once macro photography is selected in Focus mode ,it will remain in the same mode either in [📷],[M📷],or[🎥].

Self-timer Photography

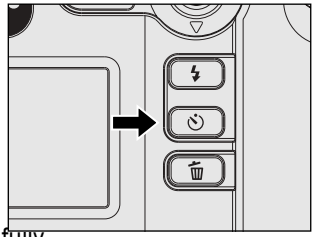
When the self-timer is used, the camera automatically takes a picture after the preset time (2 or 10 seconds).

1 Set the mode dial to [ ] [ ] or [ ].

2 Press the self-timer button.

When you press the self-timer button, the following are displayed in order on the LCD monitor.

[No display] setting OFF → [10s] 10 seconds → [2s] 2 seconds



3 Compose the picture.

Press the shutter button down halfway, and press it down fully.

4 The self-timer LED lights red, and then flashes. The photograph is then taken after the preset time (2 or 10 seconds).

When photographs are taken using the LCD monitor, the count down is displayed.

To cancel photography midway, press ▼ .

MEMO

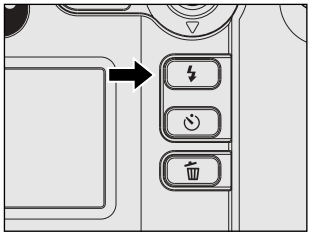
- Burst photography is not possible.
- In movie mode, press the shutter button down fully to stop recording. If this operation is not performed, photography is automatically stopped when the SD card™ runs out of free space or when the size of a single picture has reached the maximum recordable size.
- If using IR Remote Controller, the photograph taken will be delayed 2 seconds after getting IR controller signal(no matter the preset time 2 or 10 seconds).
- If using shutter button,the self-timer mode will automatically turn off after the image captured.
- If using IR Remote Controller after the image captured,the self-timer mode will remain in the same mode until you manually press self-timer button once again to exit from this mode.

Photography Using the Flash

In the default setting, the flash will be automatically set to function in dark places. No special setting is needed to set off the flash. The flash firing mode can be set to suit the conditions where the flash is to be used.
The effective firing distance of the flash is approximately 0.8 m (2.62 ft) to 3.0 m (9.84 ft) (WIDE side setting, ISO setting: [2X]).

1 Set the mode dial to [📷] or [M📷].
In the [📷] mode, flash photography can be set when [A] is selected.

2 Press the ϟ flash button to set to the desired mode while viewing the LCD monitor .
When you press the ϟ flash button, the available flash modes are displayed in the following order.
The icon for the mode that you selected is displayed in the LCD monitor .



([ϟA] Auto)* → [ϟ◉] Red-eye forced flash → [ϟ] Forced flash → [ϟ⃠] Suppressed flash → ([ϟA] Auto)*

* [ϟA] Auto can be set when [A] is selected in the [📷] mode. It can not be set in the [M📷] mode.

3 Compose the picture.

4 Press the shutter button down halfway, and press it down fully.
When you are using the flash, the flash icons on the LCD monitor are displayed in yellow when the shutter button is pressed halfway down.

[⚡A] Auto

In this mode, the flash fires automatically according to the photography conditions. This mode is ideal for general photography where you are not trying to achieve any particular effect.However the auto mode can not set in the Manual photography mode.

[⚡👁] Red-Eye Reduction

The camera fires pre-flash lighting once before the main flash in order to reduce the red eye problem. In Portrait mode, flash photography is fixed to red-eye auto. Red-eye is reduced mode effectively if the subject looks directly towards the camera. Effectiveness is also increase if the distance between the subject and camera is kept as short as possible.

[⚡] Forced Flash

The flash is forced to fire regardless of the brightness of subjects. Use the Forced Flash mode when the subject is backlit, or in artificial light (fluorescent light, etc). The flash also fires during macro photography.

[⊘] Suppressed Flash

The flash never fires regardless of the brightness of subjects. Use the Suppressed Flash mode when you are taking pictures in indoor lightning at distances too great for the flash to have any effect, such as theater performances or indoor sporting events.

MEMO

- In [▲], [🔨] or [▦] mode, flash photography is not possible.
- In [👤] mode, flash photography is fixed to red-eye auto.
- In [👤★] mode, flash photography is fixed to slow synchro.
- In the flash photography mode, the flash always fires twice. A picture is taken at the second firing.

Manual Settings

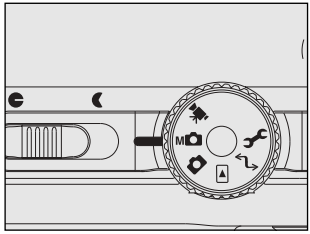
You can manually adjust settings such as exposure control, white balance, metering system, continuous photography mode, and take photographs at these settings. These are called “Manual settings”, which are saved even if the camera is turned off.

IMPORTANT

- Do not remove or load the batteries or disconnect or connect the AC adapter while the camera is on. This might return the manual settings to their defaults. If this happens, manually set the conditions again.

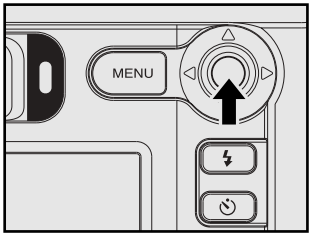
1 Set the mode dial to [M].

The manual setting values are displayed on the left of the LCD monitor screen.



2 Press ENTER.

The manual setting items are displayed.



3 Press ▲ or ▼ to select the setting item.

4 Press ▶ to display option menu, press ▲ or ▼ to select options and press ENTER.
Pressing ENTER selects the setting. To cancel, press ◀.

[EXP.] Exposure control
[W.B.] White balance
[A.E.] Metering system
[S/C] Single, continuous or AEB mode
[Focus] Focus mode setting

Set values

5 Press ENTER.
The camera is ready to take photographs.

6 Compose the picture, press the shutter button down halfway, and press it down fully.
The camera takes the picture.

Exposure control (EXP.)

[PRG] : program mode (default)
[Av] : aperture-priority mode
[Tv] : shutter speed-priority mode
[M] : full manual mode

White Balance (W.B.)

The camera determines the white balance by averaging the various kinds of light that actually enters the lens. A user can set in advance the white balance when taking photographs under specific lighting conditions.

[AW] : Automatic white balance mode (default)
[☀] : Day light mode
[☁] : Cloudy mode
[1] : bluish Fluorescent light mode
[2] : reddish Fluorescent light mode
[💡] : Incandescent light mode

Metering system (A.E.)

The camera calculates the exposure level before a photograph is taken.

[▣] :Multi metering mode can be set (default)

[●] : Spot metering mode can be set

Multi metering mode

The exposure is measured and calculated for the entire area of the screen. By dividing the entire area of the screen, the exposure level for each unit is calculated. A well balanced exposure can be obtained.

Spot metering mode

The exposure is measured in a very small area at the center of the screen. It is possible to calculate the exposure of a subject without being affected by the surrounding environment.

Single, continuous or AEB photography mode (S/C)

[□] : 1 shot mode can be set (default)
[▣] : Burst mode can be set
[AEB] : Automatic Exposure Bracketing

Automatic Exposure Bracketing (AEB)

In this mode, the camera takes three consecutive pictures in the order of standard exposure, overexposure (-0.5) and underexposure (+0.5) compensation.

Continuous image capturing (Burst)

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals.
The maximum number of photographs that can be taken continuously is 3 photographs.
Images are not recorded directly to storage media but are stored temporarily within the buffer memory.
After photography is finished, check the images and record the selected ones to storage media.

Focus Mode

By pressing “Enter” button when “Focus” icon is highlight the “Focus setting” selected. A user can select in the following order. Also the camera makes the macro mode with macro icon is the display monitor

Set Value

[AF] Normal Focus

[ ] Macro Focus

[1m] The camera will focus on subjects in a distance of 1m to take photos.

[3m] The camera will focus on subjects in a distance of 3m to take photos.

[∞] The camera will focus on subjects in a distance of ∞ to take photo.

MEMO

Once focus mode is chosen as selected photography mode,it will remain the same mode either in [ ], [ ] or [ ].

Photography in the Program Mode

The camera automatically adjusts the shutter speed and the aperture value according to the brightness of an object. This mode enables carefree photographing similarly to selecting [A] in [📷] mode. It is possible to change the white balance and the metering system in program mode.

1. Set the mode dial to [M📷].
   The manual setting values are displayed on the left of the LCD monitor screen.
2. Press ENTER.
   The manual setting items are displayed.
3. Press ▲ or ▼ to select [EXP.].
4. Press ▶ to display option menu, press ▲ or ▼ to select [PRG] and press ENTER.
   Pressing ENTER selects the setting.
5. Press ENTER.
   The camera is ready to take photographs.
6. Compose the picture, press the shutter button down halfway, and press it down fully.
   The camera takes the picture.

MEMO

◎ Difference between [PRG] and [A]
[PRG] and [A] are the same as to combinations of the automatically determined shutter speeds and aperture values.
However, their operation capability is different as shown in the right table.

Function	[PRG]	[A]
Continuous photography	O	X
Exposure Compensation	O	X
AEB	O	X
Spot metering	O	X
White balance setting	O	X

(O : possible X : not possible)

Photography in the Aperture-priority Mode

In this mode, photographs are taken with the priority given to aperture. The camera automatically sets the shutter speed according to the aperture.
A small aperture value produces a portrait photo with an out-of-focus background. The smaller the aperture value, the more out-of-focus the background becomes.
A large aperture value produces sharp images on both close objects and distant objects like landscapes. The larger the aperture value, the larger the area for sharp images.

1. Set the mode dial to [M].
   The manual setting values are displayed on the left of the LCD monitor screen.

2. Press ENTER.
   The manual setting items are displayed.

3. Press ▲ or ▼ to select [EXP.].

4. Press ▶ to display option menu, press ▲ or ▼ to select [Av] and press ENTER.
   Pressing ENTER selects the setting.

5. Press ENTER.
   The camera is ready to take photographs.

6. Press ▲ or ▼ to adjust the aperture value.
   The setting range is as follows:
   F8 / F6.8 / F5.6 / F4.8 / F4.0 / F3.4 / F2.9
   The aperture value and the shutter speed corresponding to that value are displayed on the LCD monitor. If the appropriate combination cannot be set even if the shutter speed is adjusted to its limit, the shutter speed is displayed in red. Photography, however, is possible in this state.
   Press ▲ to reduce aperture size. Press ▼ to increase aperture size.
   Note: The larger the F value, the smaller the aperture size become and vice versa.
   Exposure compensation using ◀ or ▶ to change exposure value.

7 Compose the picture, press the shutter button down halfway, and press it down fully.
The camera takes the picture.

MEMO

- If the aperture value is set to F2.9 (maximum aperture size), the increased shutter speed is restricted to 1/750 second.
- The aperture value set differ to the actual value according to the position of the zoom lens.

Photography in the Shutter Speed-priority Mode

In this mode, photographs are taken with the priority given to shutter speed. The camera automatically sets the aperture value according to the shutter speed.
A fast shutter speed produces a photograph that looks as if a moving subject is still.
A slow shutter speed produces as photograph that makes you feel that it is flowing.

1 Set the mode dial to [M].
The manual setting values are displayed on the left of the LCD monitor screen.

2 Press ENTER.
The manual setting items are displayed.

3 Press ▲ or ▼ to select [EXP.].

4 Press ▶ to display option menu, press ▲ or ▼ to select [Tv] and press ENTER.
Pressing ENTER selects the setting.

5 Press ENTER.
The camera is ready to take photographs.

6 Press ▲ or ▼ to adjust the shutter speed.
The setting range is as follows:
1/1000, 1/750, 1/500, 1/350, 1/250, 1/180, 1/125, 1/90, 1/60, 1/45, 1/30, 1/20, 1/15, 1/10, 1/8, 1/6, 1/4, 1/3, 1/2, 0"7, 1", 1"5, 2", 3", 4", 6", 8", 10", 15"
The shutter speed and the aperture value corresponding to the shutter speed are displayed on the LCD monitor. If the appropriate combination cannot be set even if the aperture is adjusted to its limit, the aperture value is displayed in red. Photography, however, is possible in this state.

Press ▲ to increase shutter speed. Press ▼ to decrease shutter speed.
Exposure compensation using ◀ or ▶ , and manual setting or film speed setting using ENTER are also possible.

7 Compose the picture, press the shutter button down halfway, and press it down fully.
The camera takes the picture.

MEMO

- When the shutter speed is set to a speed of 0.7 second or slower, photographs are taken as extended exposures.
- In AEB photography or burst photography, the shutter speed cannot be set to 0.7 second or longer.
- If a mode other than [No flash] suppressed flash mode is set in flash photography, the shutter speed is limited to between 1/2 second and 1/250 second.
- If the shutter speed is set to 1/350 second or less, the shutter speed is automatically changed to 1/250 second if the flash setting is changed to the [flash] forced flash mode or [red-eye] red-eye forced flash mode.
- If the [flash] forced flash or [red-eye] red-eye forced flash mode is set in flash photography when the shutter speed is set to a speed of 0.7 second or more, the shutter speed is automatically changed to 1/2 second.
- If the shutter speed value is set to 1/1000 second, the aperture value is limited to between F8 and F3.4.

Photography in the Full Manual Mode

Set the aperture and shutter speed values separately before taking a photograph.

1. Set the mode dial to [M].
   The manual setting values are displayed on the left of the LCD monitor screen.
2. Press ENTER.
   The manual setting items are displayed.
3. Press ▲ or ▼ to select [EXP.].
4. Press ▶ to display option menu, press ▲ or ▼ to select [M] and press ENTER.
   Pressing ENTER selects the setting.
5. Press ENTER.
   The camera is ready to take photographs.
6. Press ▲ or ▼ to adjust the shutter speed.
   and pressing ◀ or ▶ to set the shutter speed value separately are also possible.
7. Compose the picture, press the shutter button down halfway, and press it down fully.
   The camera takes the picture.

MEMO

- When pressing sort in the full manual mode, the shutter speed is adjusted, but the exposure compensation setting is not possible. However the exposure value is displayed on the LCD monitor. When the exposure value is displayed in red, it shows over- or under-exposure. It is recommended that the shutter speed and the aperture value be adjusted to obtain the proper level of exposure.
- If the aperture value is set to F2.9 (increased aperture size), the shutter speed 1/1000 second is not available.

Bulb Photography

This mode is used for taking subjects that require several seconds to photograph such as firework displays at night. When using this mode, be sure to use a tripod to keep the camera stable and prevent distortion of images.

1 Set the mode dial to [M].
The manual setting values are displayed on the left of the LCD monitor screen.

2 Press ENTER.
The manual setting items are displayed.

3 Press ▲ or ▼ to select [EXP.].

4 Press ▶ to display option menu, press ▲ or ▼ to select [M] or [Tv]and press ENTER.
Pressing ENTER selects the setting.

5 Press ENTER to set the shutter speed to 0.7 second or longer, [☾] is displayed on the LCD monitor.

6 Compose the picture, press the shutter button down halfway, and press it down fully.
The camera takes the picture at the set exposure time.
During the exposure, the viewfinder LED turns orange.
It takes about twice the set time to complete taking the photograph due to processing of the captured image.

MEMO

- Flash photography and burst photography are not possible.
- The image taken in the exposure photography mode may be blurred.

Exposure Compensation

This setting allows you to intentionally lighten or darken the entire image. Use this setting when the optimum brightness (exposure) cannot be obtained, for example, when the brightness between the subject and the background is not balanced or when the subject to photograph occupies only an extremely small part of the screen.

1 Set the mode dial to [M].

2 Press ◀ or ▶ to adjust the exposure.

The setting range is as follows. A larger value lightens the exposure,and a smaller value darkens the exposure.
The value that you set is displayed on the LCD monitor.
Press ▶ to increase (brighten) exposure, and ◀ to decrease (darken) exposure.

Exposure Setting Value

◀ (to - side) ▶ (to + side)
-2.0 / -1.5 / -1.0 / -0.5 / 0 (default) / +0.5 / +1.0 / +1.5 / +2.0

3 Compose the picture, press the shutter button down halfway, and press it down fully.

The ideal brightness sometimes cannot be obtained even if a large exposure value is set in dark photographic conditions.
In this case, press the shutter button, and check the brightness in the preview image (photographed still image).

Effective Subjects and Set Values

- Positive (+) Compensation
  - ◎Copying of printed text (black characters on white paper)
  - ◎Backlit portraits
  - ◎ Very bright scenes (such as snowfields) and highly reflective subjects
  - ◎ Shots made up predominantly of sky
- Negative (-) Compensation
  - ◎ Spotlit subjects, particularly against dark backgrounds
  - ◎Copying of printed text (white characters on black paper)
  - ◎ Scenes with low reflectivity, such as shots of green or dark foliage

Memo

¥ When [M] is selected on the [EXP.] option menu, pressing ◀ or ▶ makes the shutter speed setting possible, but does not make the exposure compensation possible. However the exposure value is displayed on the LCD monitor.

Taking Shots With the Automatic Exposure Bracketing (AEB Photography)

When it is difficult to determine the necessary exposure compensation, this mode will automatically set the camera to photograph three consecutive pictures in -0.5, 0, and +0.5 compensation.

1. Set the mode dial to [M].
   The manual setting values are displayed on the left of the LCD monitor screen.
2. Press ENTER.
   The manual setting items are displayed.
3. Press ▲ or ▼ to select [S/C].
4. Press ▶ to display option menu, press ▲ or ▼ to select [AEB]and press ENTER.
   Pressing ENTER selects the setting.
5. Press ENTER .
   The camera is ready to take photographs.
6. Compose the picture, press the shutter button down halfway, and press it down fully.
   The camera will automatically take a picture in -0.5 compensation, 0 compensation, and +0.5 compensation.

MEMO

- If burst photography is selected when the shutter speed is set to a speed of 0.7 second or longer, the shutter speed is automatically changed to 1/2 second.
- The camera takes three consecutive pictures in the order of standard exposure, overexposure (+0.5) and underexposure (-0.5) compensation.

Taking Photographs Continuously (Burst Photography)

In this mode, photographs are taken continuously at a maximum speed of 0.8 second intervals.
The maximum number of photographs that can be taken continuously is three photographs.
Images are not recorded directly to SD Memory Card but are stored temporarily within the buffer memory. After photography is finished, check the images and record the selected ones to SD Memory Card.

1 Set the mode dial to [M].
The manual setting values are displayed on the left of the LCD monitor screen.

2 Press ENTER.
The manual setting items are displayed.

3 Press ▲ or ▼ to select [S/C].

4 Press ▶ to display option menu, press ▲ or ▼ to select [ ]and press ENTER.
Pressing ENTER selects the setting.

5 Press ENTER .
The camera is ready for burst photography.
If burst photography is set when the shutter speed is set to a speed of 0.7 second or more in the [Tv] mode, the shutter speed is automatically changed to 1/2 second.

6 Compose the picture, press the shutter button down halfway, and press it down fully.
The maximum number of photography that can be taken continuously is three.
If you release the shutter button before the camera captures three images, the camera will stop taking pictures at that point.
After photography is finished, the LCD monitor automatically turns ON.

7 Press ◀ or ▶ to verify the image.
You will be allowed to choose which image to save before it is recorded to the SD Memory Card.
The number of photographs stored in the memory is displayed at the bottom right of the screen, and the number in green is the image currently displayed.
The green indication also moves as you move the image to be displayed.

8 Use ▲ or ▼ to select the recording method.
The camera is set to erase all images immediately after photography.

①[□✓] : This setting is for saving and erasing the selected image.
Press ◀ or ▶to select the image, and press ENTER.
The red ✓ mark appears under the selected image. To cancel selection of the image, press ENTER again.

②[🗐✓] : This setting is for saving all images.
Press ENTER.
All images are selected, and all images with 🗑 turns into a red ✓.
This item cannot be selected if there is not enough space on the SD Memory Card.

③[🗐🗑] : This setting is for erasing all images.
Press ENTER.

① to ③ can be combined regardless of their order to set saving and erasing of images.

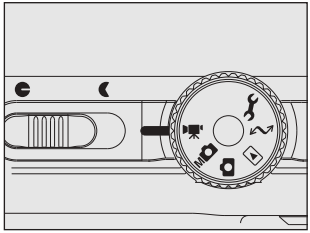
9 Use ▼ to select [🖳] and press ENTER.
The image is saved or erased, and the camera is then ready to take photographs.

MEMO

- You can also carry out step 9 while verifying the image in step 8.
- Even if photography is terminated midway before capturing three images by releasing the shutter button, images already photographed can be saved and erased by the above method.
- The length of time to capture images varies according to the photographic conditions.
- Self-timer photography and flash photography are not possible.

Making Movies

By dialing the MODE switch to " " position, the camera can take moving image without voice recording. The camera shows the preview image on the LCD monitor. (In the " " mode, the LCD monitor can not be turned off.)



1 Set the mode dial to [ ].

2 Compose the picture, press the shutter button down halfway, and press it down fully.
Photography begins.
The maximum photography time (seconds) appears on the LCD monitor.

3 To stop making movies, press the shutter button down fully again.
If you do not do this, photography is automatically stopped when there is no more free space on the SD Memory Card, or when the maximum size that a single movie can be recorded is reached.

Shutter button

Lightly pressing this button in " " mode, compose the picture. Once the button is deeply pressed, photography begins. Photography is automatically stopped when there is no more free space on the SD Memory Card, or when the maximum size that a single movie can be recorded is reached. To press the shutter button down fully again can stop making movies.
When making a movie, flash photography is not possible.

Self Timer button

In " " mode, the camera can select self timer mode among "off (default)", "10-second" and "2-second" in this order cyclically. Press the shutter button down fully to stop recording.

IR Remote Controller

In " " mode, the IR Remote Controller is not possible.

MEMO

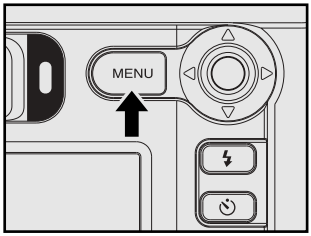
- Flash photography is not possible.
- The image size displayed on the LCD monitor becomes FULL (320 x 240) or HALF (160 x 120). The movie made in FULL size is displayed on the entire LCD monitor, and that made in HALF size is displayed in the center of the screen.

Changing the Preset Conditions (RECORDING MENU)

This menu is for setting the basic settings to be used for photography in the [📷], [M📷] or [🎥] photography modes.

1 Set the mode dial to [📷], [M📷] or [🎥].

2 Press the MENU button.
The RECORDING MENU is displayed.



3 Use ▲ or ▼ to select the desired item ① and press ▶.
The options ② are displayed.
Note: The image appearing through the lens will be displayed for [LCD ☀].
PREVIEW
COLOR
ISO
SHARPNESS
CONTRAST
DIGITAL ZOOM
LCD ☀
QUALITY

* The above menu is the RECORDING MENU in the [📷] mode.

4 Use ▲ or ▼ to select the desired setting from the tab menu ②, and press ENTER.
This saves the settings, and returns the display to the RECORDING MENU.

5 To quit the RECORDING MENU, press the MENU button.
The camera is now ready to take photographs.

PREVIEW

Set to display a photographed image on LCD monitor immediately after you have taken the shot.
[OFF] : Do not display preview. (default)
[ON] : Display preview.
A photographed image is displayed on the LCD monitor for two seconds. By lightly pressing “Shutter” button, preview is canceled.
The three images that you took are displayed for about two seconds each in the AEB photography mode.
In case of burst photography, the LCD monitor automatically turns on and display image after photography is finished.
In case of 16 multi-photography shot, 16 photography images are displayed as one image

COLOR

Set the color of the image to be photographed.

[STANDARD]	: Standard color (default)
[VIVID]	: Vivid color
[MONOCHROME]	: Black and white
[SEPIA]	: Sepia

ISO [📷]

Sets the color mode and photographic sensitivity at which the image is to be recorded.
Warning: Noise increases when the ISO is changed to higher settings.

[NORMAL] : Equivalent to color ISO100
[2X] : High-sensitive photography equivalent to color ISO200
[4X] : High-sensitive photography equivalent to color ISO400

During [2X], the ISO will be automatically set between ISO100 and ISO200. During [4X], ISO will be automatically set between ISO100 and ISO400.Default is [2X].

ISO [M📷]

Sets the color mode and photographic sensitivity at which the image is to be recorded.
Warning: Noise increases when the ISO is changed to higher settings.

[NORMAL] : Equivalent to color ISO100
[2X] : High-sensitive photography equivalent to color ISO200
[4X] : High-sensitive photography equivalent to color ISO400

During [2X], the ISO will be automatically set to ISO200. During [4X], ISO will be automatically set to ISO400.

MEMO

◎In movie mode, ISO will be automatically set between ISO100 and ISO400 regardless of its setting.

SHARPNESS

Sets the sharpness at which the image is to be recorded.

[NORMAL] : Normal sharpness (default)
[SOFT] : Soft effect
[HARD] : Hard effect

CONTRAST

Sets the contrast of the image to be photographed.

[NORMAL] : Automatic (standard) setting (default)
[STRONG] : Strong contrast
[SOFT] : Soft contrast

DIGITAL ZOOM

Enlarges the center of the screen and takes photographs with the focal distance increased by factor of 2.2.

[ON] : Enables digital zoom photography. (default)
[OFF] : Disables digital zoom photography.

LCD ☼

Adjusts the brightness of the LCD monitor. This adjustment does not adjust the brightness of the image to be recorded.

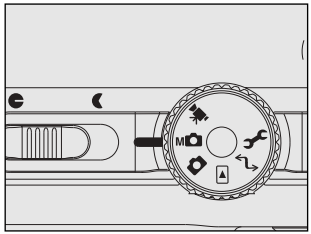
[-5] to [+5]

◎ To adjust the brightness of the LCD monitor.

QUALITY

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed.
Change the setting according to how the image is to be used and the remaining amount of space in the SD Memory Card.

1. Press the Menu button.



2. Select Quality Menu, keep pressing ▲or▼ button until the QUALITY is highlighted.

3. After pressing the ▶ button while the QUALITY is highlighted, the LCD shows the QUALITY menu.

4. By pressing ▶ button, user can select size. The size item is reversely display in white. Press ▲or▼ to select the size setting user desired to set, and press ENTER button.

5. By pressing ▶ button during the size item is highlighted, the QUALITY item is reversely displayed in white. Press ▲or▼ to select the quality setting and press ENTER button.

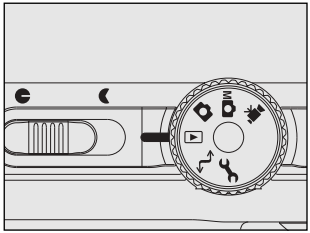
6. To select another option, press ▲or ▼ button while still/movie/ok/ cancel is fully highlighted.

7. After pressing ENTER button while OK is highlighted, these combinations are set and the LCD monitor display returns to previous photography mode.

Playing Back Photographed Images (Single-Frame Playback)

Play back photographed still images one image at a time.

1 Set the mode dial to [▶].
The last recorded image appears on the LCD monitor.



2 Press ◀ or ▶ to move forward and reverse.
▶ to advance to next frame/ ◀ to go back one frame
Holding down ◀ or ▶ moves forward or reverse continuously.

Press ENTER, nine images are displayed simultaneously.

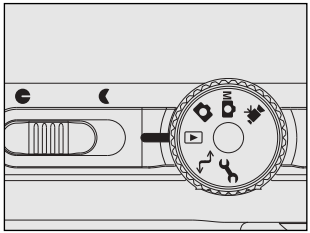
MEMO

- It is possible to play back any images in any folders by pressing ◀ or ▶ during playback.
- Pressing ▶ at the last image displays the first image, and pressing ◀ at the first image displays the last image.
- Images can be rotated by pressing ▲ or ▼ during playback.
  Pressing ▲ rotates an image counterclockwise, and pressing ▼ rotates it clockwise.
- IR Remoter Controller works as forward(▶) button in Playback mode to change picture to next one.

Playing Back Movies

Play back movies that you have recorded. The movies made in FULL size are displayed on the entire LCD monitor, and those made in HALF size are displayed in the center of the screen.

1 Set the mode dial to [▶].
The last recorded image appears on the LCD monitor.



2 Press ◀ or ▶ to select the movie to play back.

3 Press ▲ .
Playback of the selected movie begins.
The user can control playback as shown on the table of the next page by pressing various buttons during playback, a pause or stopping.

A user can control playback movie file as the following table.

	During playback	During pause	During stopping
▶	2x-speed playback ◎2x-speed playback is performed for the duration that ▶ is held down.	1-frame feed ◎Each press of ▶ feeds the image by one frame. ◎1-frame feed is continued for the duration that ▶ is held down.	
◀	Reverse playback, 2x-speed playback ◎The press of ◀ starts a reverse playback. ◎Playback becomes 2x-speed reverse playback for the duration that ◀ is held down.	Reverse 1-frame feed ◎Each press of ◀ feeds the image in reverse by one frame. ◎1-frame feed is continued for the duration that ◀ is held down.	
▲	Pause ◎Playback is paused.	Canceling pause ◎After pause is cancelled, playback resumes at the last state that was active before the pause.	Play back
▼	Stop Playback returns to the start of the movie.		
ENTER	Stop The display returns to thumbnail playback.		

MEMO

◎The image size displayed on the LCD monitor becomes FULL (320 x 240) or HALF (160 x 120). The movies made in FULL size is displayed on the entire LCD monitor, and those made in HALF size is displayed in the center of the screen.

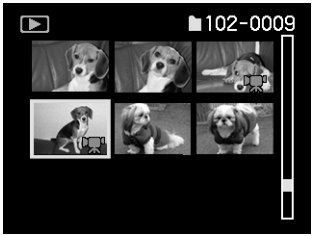
Displaying a List of Images (Thumbnail Display)

Nine reduced images are simultaneously displayed on the LCD monitor. This manual calls this display “thumbnail display.”
This feature is useful, for example, when there are many images recorded in the SD Memory Card. After you have displayed the thumbnail display, you can select the desired image and display it in the regular display.

1 Set the mode dial to [▶].
The last image frame appears on the LCD monitor.

2 Press ENTER.
Nine images are displayed simultaneously.

3 Use ▲, ▼, ◀ or ▶ to move the cursor to select the image to be displayed at regular size.
The cursor selected image is displayed with green frame.
Pressing the buttons continuously moves the cursor continuously.



* In the thumbnail display mode, [🎬] icon is displayed for the movie data.

4 Press ENTER.
The selected image is displayed at its regular size.

MEMO

◎ It is possible to play back all images in all folders by pressing ◀ or ▶ during playback in the thumbnail display mode.

Enlarging Photographed Images (Zoom Playback)

Enlarges selected portions of images being played back at two levels. Images can be displayed enlarged when being played back one image at a time.
Movies and images photographed in the multi mode cannot be displayed using the zoom playback feature.

1 Set the mode dial to [▶].
The last image frame appears on the LCD monitor.

2 Use ◀ or ▶ to select the frame you want to enlarge.
You can also select the image by the same operation as for thumbnail playback

3 Adjust the zoom ratio by the Zoom switch.
Pressing the Zoom switch to the "T" will enlarge the image.
To return to normal magnification, press the Zoom key towards "W".
The image is displayed enlarged, and a white frame and green frame are displayed on the LCD monitor.
The white frame indicates the entire image, while the green frame shows the location of the currently enlarged area.

4 Use ▲, ▼, ◀ or ▶ to select the area to enlarge.
Adjust the display area to enlarge while viewing the white and green frames.

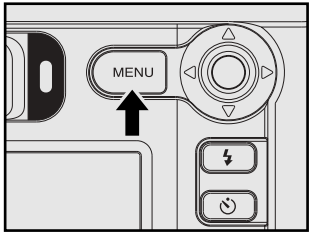
5 To return to the regular display, press ENTER.

Auto Playback (Slideshow)

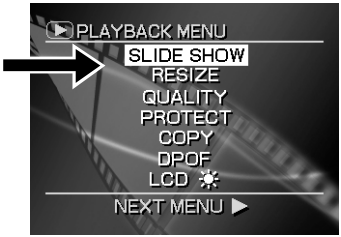
Automatically play back one image at a time in order. This feature is not supported in the movie mode.

1 Set the mode dial to [▶].
The last image frame appears on the LCD monitor.

2 Press the MENU button.
The PLAYBACK MENU is displayed.



3 Use ▲ or ▼ to select [SLIDE SHOW] and press ▶.
The slideshow begins and [▶] is displayed on the LCD monitor.
The next image is displayed every three seconds.



4 To quit the slideshow, press ENTER.
The LCD monitor displays the image when ENTER is pressed.
The slideshow is repeated until ENTER is pressed.

Memo

- The Auto Power OFF function does not operate during automatic playback.
- Auto playback is available for images in all folders.
- Movies are not played back during automatic playback.

Playback of Multi Image Pictures

Automatically plays back the 16 images photographed in the multi photography mode in quick succession.

1. Set the mode dial to [▶].
   The last image frame appears on the LCD monitor.
2. Use ◀ or ▶ to select the images photographed in the multi photography mode.
   You can also select the image by the same operation as for thumbnail display.
3. Press the Zoom key towards “T” to begin playback.
   Automatic playback begins.

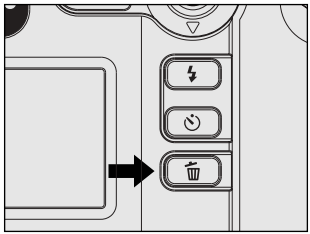
Erasing Images (Erase Frame)

Erases images one image at a time.
Note: Images cannot be erased when they are protected or the SD Memory Card is write-protected.

1 Set the mode dial to [▶], [📷], [M📷] or [🎥].
When [▶] is selected, the last image frame or the thumbnail display appears on the LCD monitor.

2 When [▶] is selected, use ◀ or ▶ to select the image to be erased.
When [📷], [M📷] or [🎥] is selected, only the last recorded image can be erased.

3 Press the 🗑 erase button.
The erase icon is displayed at the left of the screen.



4 Use ▲ or ▼ to select [□], and press ENTER.
This erases the image and returns to the previous mode.
To cancel erasing of image data, select [↩] and press ENTER.

5 To continue erasing images, repeat the above procedure from step 2.

MEMO

- When [PROTECTED] is displayed on the LCD monitor, cancel the protection or remove DPOF write-protection .
- If you take a photograph after erasing an image, a number continuing from the last photographed image is assigned as the image number.
- Images can also be erased in the thumbnail mode. In this case, the camera enters the single frame playback (frame playback) mode, and enters the thumbnail playback mode after the image is erased.

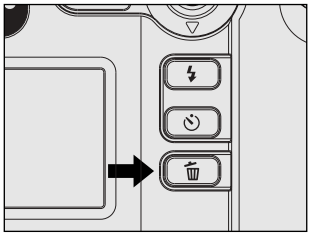
Erasing Folders (All Images in a Folder/All Folders)

Erases selected folders and all contents currently recorded to the SD Memory Card loaded on your camera. There are two ways of erasing images, by individual folders or by all folders.
Note: Images cannot be erased when they are protected or when the SD Memory Card is write-protected .

The folder to be erased differs according to the position of the mode dial.
[▶] : Folder of images currently being played back
[📷], [M📷] or [🎥] : Folder of images currently being photographed

1 Set the mode dial to [▶], [📷], [M📷] or [🎥].
Set the mode dial to the type of folder you want to erase.
When [▶] is selected, the last image frame or the thumbnail display appears on the LCD monitor.

2 Hold down the 🗑 erase button for two seconds.
The erase icon is displayed at the left of the screen.



3 Use ▲ or ▼ to select [🗀] or [🗐] and press ENTER.

[🗀] : Erases images in the currently selected folder and folders.

[🗐] : Erases all folders recorded on the SD Memory Card.

The images or folders are erased, and the camera returns to the respective mode.

To cancel erasing of image data, select [↩] and press ENTER.

When [▶] is selected, [NO IMAGE] is displayed after all folders have been erased (unless the SD Memory Card contains protected images).

Memo

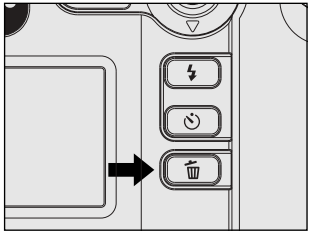
◎When all images in a folder are erased, that folder itself is also erased.

Formatting the SD Memory Card

Formatting erases all images and reformats the SD Memory Card loaded in your camera. Protected images are also erased. SD Memory Card cannot be formatted if it is write-protected .

1 Set the mode dial to [▶], [📷], [M📷] or [🎥].
When [▶] is selected, the last image frame or the thumbnail display appears on the LCD monitor.

2 Hold down the 🗑 erase button for two seconds.
The erase icon is displayed at the left of the screen.



3 Use ▲ or ▼ to select [🗑], and press ENTER.
To cancel formatting, select [↩] and press ENTER.

4 To reset the image number, use ▲ or ▼ to select [EXECUTE], and press ENTER.
To cancel resetting of image numbers, select [CANCEL].

MEMO

◎ SD Memory Card must be formatted before using for the first time. Also, it is recommended to periodically reformat the SD Memory Card to remove any miscellaneous files and ensure maximum storage capacity.

Reducing the Image Size (Resize)

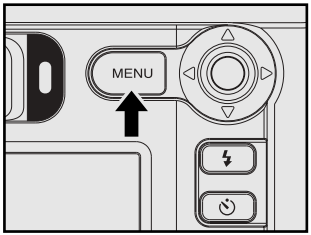
Changes FULL size (2048 x 1536 pixels) images to HALF size (1024 x 768 pixels), and further to SMALL size (640 x 480 pixels), and overwrites an old FULL size image with the new size image. This is called “resizing” in this manual.

Resizing a previously saved image when the SD Memory Card has run out of storage space during photography increases space on SD Memory Card so that you can continue taking photographs.

The following images cannot be resized:

- SMALL size images
- Images taken with another camera
- Images taken in the multi photography mode
- Protected images
- Movies
- Images cannot be resized when the SD Memory Card is write-protected.

1 Set the mode dial to [▶].
The last image frame appears on the LCD monitor.



2 Press the MENU button.
The PLAYBACK MENU is displayed.

3 Use ▲ or ▼ to select [RESIZE] and press ▶ .
The RESIZE menu is displayed.
If there are no images that can be resized, or if a movie folder is selected, a message appears on screen and the screen returns to the PLAYBACK MENU.

4 Use ◀ or ▶ to select the image and press ENTER to set image size.

The current image size is displayed under the image.
Each press of ENTER changes the icons as follows:
[▣] ..... HALF size [▣] ..... SMALL size

To cancel the selection, press ENTER again.
If you want to resize two or more images, repeat the procedure for the necessary number of images.
When the Zoom key is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom key towards the "W".

5 Use ◀ or ▶ to select [EXECUTE], and press ENTER.

The screen indicating that the image is being resized appears.
To quit resizing, select [CANCEL] and press ENTER.
When resizing ends, the screen returns to the PLAYBACK MENU.
To quit the PLAYBACK MENU, press the MENU button.

MEMO

·It is possible to reduce the size of an image. It is not possible to increase the size of an image, or to restore size after it has been decreased.
·It is possible to play back any images in all folders by pressing ◀ or ▶ during playback.

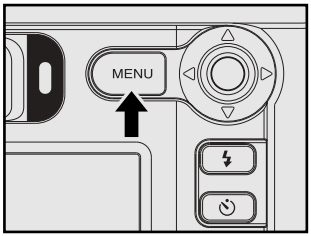
Compressing Images (Quality)

Compresses images down to half of their size or more, and overwrites an old size image with a newly compressed image.
Compressing a previously saved image when the SD Memory Card has run out of storage space during photography increases space on SD Memory Card so that you can continue taking photographs.

The following images cannot be compressed:
- ★(BASIC) image quality images
- Images taken with another camera
- Protected images
- Movies

1 Set the mode dial to [▶].
The last image frame appears on the LCD monitor.

2 Press the MENU button.
The PLAYBACK MENU is displayed.



3 **Use ▲ or ▼ to select [QUALITY], and press ▶ .**
The SET-UP menu is displayed.
If there are no images that can be compressed, or if a movie folder is selected, a message appears on screen and the screen returns to the PLAYBACK MENU.

4 Use ◀ or ▶ to select the image, and press ENTER to set the compression ratio.

The current compression ratio (quality) is displayed under the image.
Each press of ENTER changes the number of stars as follows:

[NORMAL] ******

[BASIC] *****

If you want to compress two or more images, repeat the procedure for the necessary number of images.
When the Zoom switch is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom switch towards the "W".

5 Use or to select [EXECUTE], and press ENTER.

The screen indicating that the image is being compressed appears.
To quit compression, select [CANCEL] and press ENTER..
When compression ends, the screen returns to the PLAYBACK MENU.
To quit the PLAYBACK MENU, press the MENU button.

MEMO

- It is possible to compress an image and decrease quality. It is not possible to uncompress an image to increase quality, or to restore an image after it has been compressed.
- It is possible to play back any images in all folders by pressing or during playback.

Print Information

The number of prints or the image date can be set in a DPOF (Digital Print Order Format) file for images to be printed (developed). This feature applies to still images only. Printing can be done easily if you just take the SD Memory Card containing the images and DPOF file to the photo lab.

1 Set the mode dial to [▶].

2 Press the MENU button.
The PLAYBACK MENU is displayed.

3 Press ▲ or ▼ to select [DPOF] and press ▶.

4 Press ▲ or ▼ to select [SELECT IMAGE], and press ENTER.

5 Press ▲ or ▼ to select [SELECT] or [ALL], and press ENTER.

[SELECT] : Sets one image at a time.
[ALL] : Sets all images at once.

6 Set the number of prints and date.

①Press ◀ or ▶ to select the image, and press ▲ or ▼ to set the number of copies.
Up to 99 copies can be set for a single image.
When the Zoom key is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom key towards the "W".

②When you have finished this setting, press ENTER.
The DATE screen is displayed.
The date of the image can be printed in the lower right corner of the picture.

③Press ▲ or ▼ to select [YES] or [NO], and press ENTER.
If you want to print the date, select [YES] and press ENTER.
If you do not want to print the date, select [NO] and press ENTER.
The message "CREATE DPOF FILE?" is displayed.

MEMO

- It is possible to play back any images in all folders by pressing ◀ or ▶ during playback.
- The date printed in the picture will depend on the date set into the camera. For the correct date to be printed onto the picture, please check the date set into your camera before the image is photographed.

7 Press ▲ or ▼ to select [EXECUTE], and press ENTER.
The DPOF information file is created, and the screen returns to the initial display when the operation ends.
To continue setting, select [CHANGE SETTINGS]. To quit setting without creating a DPOF file, select [CANCEL] and press ENTER.

8 To end setting, press ▲ or ▼ to select [END], and press ENTER.
To cancel confirmation of settings, proceed to step 9.

9 Select the desired operation.

[CONFIRM]: Press this to confirm the settings.

① Press ▲ or ▼ to select [CONFIRM], and press ENTER.
② After confirming the settings, press ENTER.
③ Select [END] and press ENTER.

[CLEAR ALL]: Press this button to clear all settings.

① Press ▲ or ▼ to select [CLEAR ALL], and press ENTER.
② To clear all settings, select [EXECUTE] and press ENTER.
To cancel [CLEAR ALL], select [CANCEL] and press ENTER.
③ To remove the write-protection, select [YES] and press ENTER.
④ Select [END] and press ENTER.

MEMO

- When the SD Memory Card already contains a DPOF information file, the message "RECREATE DPOF FILE?" is sometimes displayed. Note that if you select [YES], the file is overwritten, and the information of the existing DPOF information file is erased. The same also applies when the DPOF information file is overwritten on a personal computer and values not supported by this camera were set.
- Images set in the DPOF format are automatically protected. Write-protection cannot be removed by regular methods.
- You can specify up to 99 prints or up to 999 frames in a single SD Memory Card. The maximum number of prints you can specify in a single SD Memory Card is limited to 10000.

Protecting Images

This feature prevents images from being erased.

IMPORTANT

◎Formatting erases all the images on a SD Memory Card, regardless of whether they are protected or not.
◎To protect the entire SD Memory Card,see “Write Protection”(page 35).

Protecting an Image

1 Set the mode dial to [▶].
The last image frame or the thumbnail display appears on the LCD monitor.

2 Press the MENU button.
The PLAYBACK MENU is displayed.

3 Use ▲ or ▼ to select [PROTECT] and press ▶.
The PROTECT menu is displayed.

4 Use ▲ or ▼ to select the desired image to protect, and press ENTER.

This fixes the image to be protected, and [ ] is displayed under the image.
To cancel the selection, press ENTER again.
To write-protect two or more images, repeat this procedure for the necessary number of images.
When the Zoom key is pressed toward "T" during image selection, the image is displayed to fit the entire screen. To redisplay the original image, move the Zoom key towards the "W".

MEMO

◎It is possible to play back any images in any folders by pressing ◀ or ▶ during playback.

5 Use ▲ or ▼ to select [EXECUTE], and press ENTER.

To quit write-protection, select [CANCEL] and press ENTER.
When write-protection ends, the screen returns to the PLAYBACK MENU.
To quit the PLAYBACK MENU, press the MENU button.

MEMO

◎When the PROTECT setup screen is displayed again, [ ] is displayed under protected images.
◎To cancel write-protection for an image, write-protection is simultaneously canceled if set at step 4.

Removing the Protection

1 Carry out steps 1 to 3 in “Protecting An Image”.

2 Use ◀ or ▶ to select the image to unprotect, and press ENTER.

This fixes the images whose protection is to be removed, and [ ] under the image changes to [ ].
To unprotect an image, press ENTER again.
To remove the protection from two or more images, repeat this procedure for the necessary number of images.

MEMO

◎It is possible to play back any images in all folders by pressing ◀ or ▶ during playback.

3 Carry out step 5 in “Protecting An Image” .

MEMO

◎To write-protect another image, write-protection can be simultaneously carried out if set at step 2.
◎[ ] is displayed for images that are specified in the DPOF format, and write-protection cannot be removed. To remove write-protection, cancel the DPOF format setting .

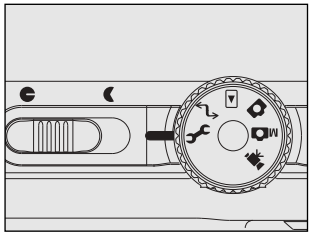
Basic Settings (mode)

This feature allows you to set up the default settings for using your camera in addition to image-related settings. This is called “setup”. The following items can be changed in the SET-UP mode:

AUTO POWER OFF/SOUND/TIME & DATE/OSD LANGUAGE/VIDEO OUT/QUALITY/FRAME NUMBER/ SYSTEM INFO.

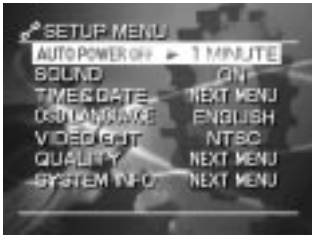
The details set here are held in memory even if the camera is turned OFF.

1 Set the mode dial to [ ].
The SETUP MENU appears.



2 Use ▲ or ▼ to select the item you want to set.

AUTO POWER OFF	Selects the time for automatic power off
TIME & DATE	Setting the Time and Date
OSD LANGUAGE	Selecting the Monitor Display Language
VIDEO OUT	Setting Video Output
QUALITY	Setting image quality and size
FRAME NUMBER	Resetting Frame Number
SYSTEM INFO.	Returning Settings to the Defaults



3 Press ▶ .
The tab menu is displayed.

Tab menu

4 Use ▲ or ▼ to change the setting in the tab menu, and press ENTER.
To cancel changing of settings, press ◀ .

5 To quit the SETUP MENU, change the mode dial setting.

AUTO POWER OFF

If no operation is carried out for a fixed amount of time (default: about one minute), power consumption is set to its minimum state (power almost turned off) to prevent battery wear. This is called the Auto Power OFF. This setting allows you to set the time when the camera turns off automatically. This function is not activated during automatic playback or in the [ ] PC mode.
To return to the normal state after the Auto Power OFF has been executed, press the POWER button to turn the power on again.

[1 MINUTE] (default)
[2 MINUTES]
[3 MINUTES]

SOUND

Sets whether or not to sound the beep tone.
[ON]: Sounds the beep tone according to the operating state or operation. (default)
[OFF]: Does not sound the beep tone in any state.

TIME/DATE

Sets the date and time.
Seconds cannot be set.

1 After pressing the ▶ button while the TIME/DATE is highlighted, the TIME&DATE set mode can be executed. Then LCD indicates Year/ Month/Day/Hour/Minute on the screen.

2 Using ◀ or ▶ button to select the item to set, and use ▲ or ▼ button to set the value for each item.
Pressing ▶ advances the selection in the following order:

YEAR → MONTH → DAY → Hour → Minute → OK → CANCEL

3 Afterward pressing ENTER button when OK is highlighted, date time data is updated and return to the previous main menu.
To quit setting, select the [CANCEL] button and press ENTER.

OSD LANGUAGE

Set the display language of menus displayed on the LCD monitor.
[ENGLISH]: English (default)
[JAPANESE]: Japanese
[DEUTSCHE]: German
[FRANCE]: French
[SPANISH]: Spanish

VIDEO OUT

Sets the video output system according to the country in which your camera used.
[NTSC]: NTSC system
[PAL]: PAL system
The default setting is different depending on destination country/area.

QUALITY

Set the size (number of pixels) and quality (compression ratio) of the image to be photographed. Change the setting according to how the image is to be used and the remaining amount of space in the SD Memory Card.

1. SETUP MENU appears.
2. Select Quality Menu, keep pressing ▲or ▼ button until the QUALITY is highlighted.
3. After pressing the ▶ button while the QUALITY is highlighted, the LCD shows the QUALITY menu.
4. By pressing ▶ button, user can select size. The size item is reversely display in white. Press ▲or ▼ to select the size setting user desired to set, and press ENTER button.
5. By pressing ▶ button during the size item is highlighted, the QUALITY item is reversely displayed in white. Press ▲or ▼ to select the quality setting and press ENTER button.
6. To select another option, press ▲or ▼ button while still/movie/ok/cancel is fully highlighted.
7. After pressing ENTER button while OK is highlighted, these combinations are set and the LCD monitor display returns to previous SETUP MENU.

RESET FRAME NUMBER

Sets whether or not to reset the image number when you take photographs. When the frame number is selected, the message “RESET FRAME NUMBER” is displayed.
Press 5or 6to select [EXECUTE], and press ENTER.
(Frame number. Default reset, folder number is 100 and file number is 0001).
Resetting of images is supported only for the still image mode.
To reset movie images numbers, you must delete the entire folder.

[CANCEL]: Does not reset the image number
[RESET]: Reset the image number

SYSTEM INFO.

Sets whether or not to return the settings in the SETUP MENU to the original factory settings. (TIME&DATE and OSD LANGUAGE will not be reset.)

1 After pressing the ▶ button while the SYSTEM INFO is highlighted, the SYSTEM INFO menu is displayed.

2 Press ▲ or ▼ button to select the item and press ENTER.

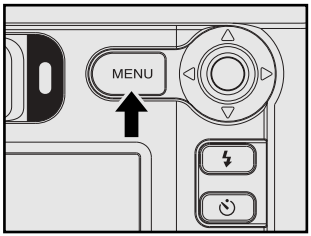
[FIRMWARE VER.]:Displays the firmware version of this camera.
[CARD INFO.]:Displays the SD Memory Card information
[RESET]:Returns to their default settings.

Adjusting the LCD Monitor Brightness

This adjustment adjusts the brightness of the LCD monitor and not the brightness of the recorded image.

1 Set the mode dial to [▶], [📷], [📷M] or [🎥].

2 Press the MENU button.
The RECORDING MENU or PLAYBACK MENU is displayed.
You can set the LCD monitor brightness in either of these menus.



3 Use ▲ or ▼ to select [LCD] and press ▶ .
The image and the LCD menu are displayed.

4 Use ◀ or ▶ to adjust the brightness.
Press ◀ to darken (-) the LCD monitor, or ▶ to lighten (+) the LCD monitor.
The LCD monitor can be adjusted within the range [-5] to [+5].
(Default is 0.)

5 Press ENTER.
This returns the camera to the previous mode.

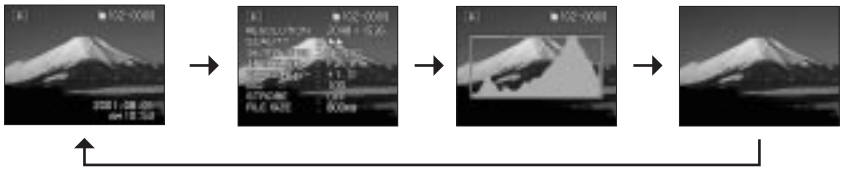
DISP Button and LCD Monitor Display (In Playback Mode)

This item switches the display on the LCD monitor when playing back photographed images. You can switch the display to show a list of detailed information (size, compression ratio, shutter speed, aperture, etc.) or you can display histograms, etc.

1. Set the mode dial to [▶].
2. Press ◀ or ▶ to select the image.
3. Press the **DISP** button.
   Each press of the **DISP** button switches the display format as follows:

Standard → Detailed information → Histogram → Image only

<Standard> <Detailed information> <Histogram> <Image only>



MEMO

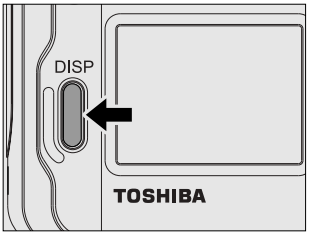
◎When playing back movie images, switching is between standard and image only.

DISP Button and LCD Monitor Display (In Photography Mode)

This item switches the display on the LCD monitor when taking photographs.

1 Set the mode dial to [📷], [📷M] or [🎥].

2 Press the **DISP** button.
Each press of the **DISP** button switches the display format as follows:



OSD full display → OSD display off → LCD monitor off

MEMO

- When any button is pressed while OSD display is off, the monitor displays the alteration on the screen for two seconds.
- When the LCD monitor is off, the digital zoom function is forcibly canceled.
- In the movie mode or macro photography mode, the LCD monitor can not be turned off.
- When the LCD monitor is off, any setting for manual, exposure compensation, aperture value, shutter speed value or focus is not possible.

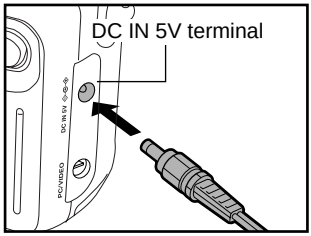
Taking and Playing Back Photographs on a TV

Television sets can be used to compose images for photography or playback. To do this, the camera must first be connected to the TV. We recommend using the AC adapter on an indoor power outlet when available.

IMPORTANT

- Before you connect your camera to other equipment, be sure to turn all other connected equipment OFF. If you connect your camera to other equipment with the power still ON, the screen may flicker or the image may not be displayed normally.

1 Connect the plug of the AV cable (provided) to the PC/ VIDEO terminal on the camera.



2 Connect the plug of the VIDEO cable to the video input terminal on the TV.

3 Take photographs or play them back.
Details of operation are the same as taking photographs and playing them back on the LCD monitor.

MEMO

- The image before the photograph is taken is slightly less clear than playback images. (This is because television displays images at a lower resolution.)
- The display unit varies according to the output system.
- With the NTSC system, images can be displayed simultaneously on the LCD monitor and TV during photography and playback.
- With the PAL system, images cannot be displayed simultaneously. When a cable is connected, only TV display is available.
- With the PAL system, images are played back with a black frame surrounded.

Transferring Images to a PC

You can transfer images photographed on your camera to a PC using the packaged CD-ROM and USB cable.
Images recorded on SD Memory Card can also be transferred to a PC using the PC card adapter (sold separately)
To transfer images to a PC, software must be installed and special cables connected.
For details, refer to the User's Guides for your PC and the Software Manual.

Using SD Memory Card on a PC

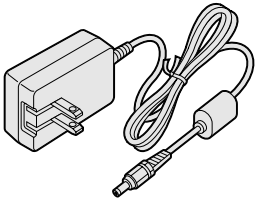
- When you use SD Memory Card, do not change or erase folders or file names (image data) on the SD Memory Card. Doing so might prevent the SD Memory Card from being used on the camera.
- Format the SD Memory Card only on your camera.
- To edit image data, copy the image data to hard disk on the PC, and edit the copied image data.

Separately Sold Accessories

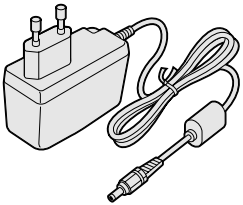
The following items are also available as separately sold items.

- SD Memory Card (3.3 V)
  32MB (SD-M3201M)/64MB (SD-M6401M)/128M (SD-M1280M)

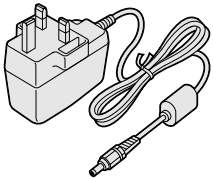
- AC Adapter
  For the US/Canada: PDR-AC20A
  For Europe: PDR-AC20E
  For the UK: PDR-AC20U



PDR-ACM1A
(for the US and Canada)

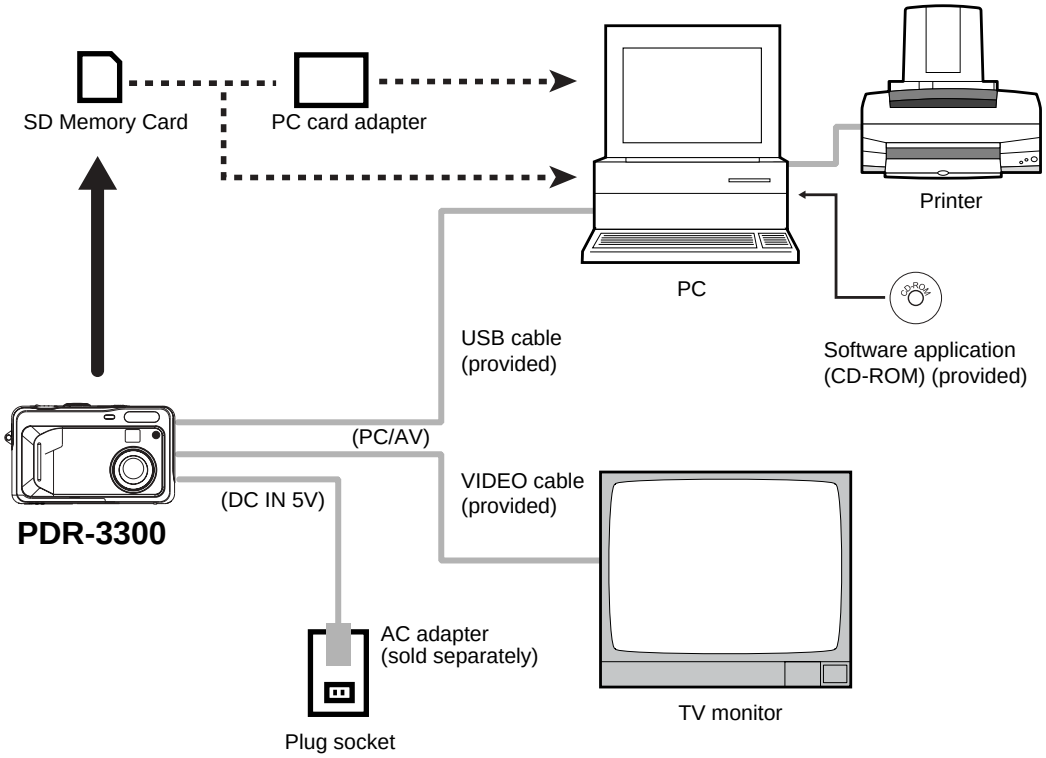


PDR-ACM1E
(for European Continent)



PDR-ACM1U
(for the UK)

Connecting to Other Devices



Definitions of the Color of the Viewfinder LED

The color of the viewfinder LED indicates the state of the camera. The meaning of the LED color may differ according to the mode dial setting.

Viewfinder LED

Color	State	Meaning		
		Photography mode	Setup mode	PC mode
Green	On	AE or AF is locked with the shutter button held half down	In standby mode.	In communication to PC. (SD Memory Card is in.)
	Flashing	Self-timer in operation at a handshake alarm	——	——
Red	On	Writing to SD Memory Card in progress	Accessing of SD Memory Card in progress	In connecting to PC (SD Memory Card is in.)
	Flashing	When the image is not in focus.	——	——
Orange	On	Processing image. Charging of flash in progress.	——	Disconnect. (SD Memory Card is in.)
	Flashing	Hardware malfunction		SD Memory Card is not in.

Self-timer LED

The flash of self-timer LED indicates the state of self-timer.

Color	State	Meaning	
		2seconds timer	10seconds timer
Red	On	——	After press "Shutter" button down fully.
	Flashing	Shot after 2seconds / Getting IR controller signal	Shot after 3seconds / Getting IR controller signal

IR Remote Controller

The camera provides IR Remote Controller, which works as the function of shutter release button in Capture mode. In case of self-timer is active, the picture taken will be delayed 2 seconds after getting IR Remote controller signal. It will remain the same mode until you manually press Self-Timer button once again to exit from the mode. (Burst photography is not possible.) IR Remote controller works as forward button in Playback mode to change picture to next one.

Specifications

Camera body

Model	Toshiba Digital Still Camera PDR-3300									
Recording medium	SD Memory Card 8/16/32/64/128MB compatible									
Compressio system	JPEG – compliant									
Image file format	Exif ver. 2.1, AVI									
<Still Image Mode> FULL size: 2048x1536 pixels HALF size: 1024x768 pixels SMALL size: 640x480 pixels	SD Memory Card	FULL			HALF			SMALL		
		***	**	*	***	**	*	***	**	*
	8MB	5	8	16	22	34	68	34	51	102
	16MB	12	18	36	50	75	150	75	113	226
	32MB	25	37	75	105	157	315	157	236	473
	64MB	51	77	154	215	322	645	322	484	968
	128MB	104	156	313	435	652	1305	652	979	1958

<Movie Image mode> Standard movie photography time	Quality Mode	Compression Ratio	Image Size	Frame Size	Photography Time (secs)
	FINE	1/10	FULL	16KB	30
	***	1/7	HALF	6KB	90
	NORMAL	1/14	FULL	11KB	45
	**	1/10	HALF	4.5KB	120

FULL size: 320x240 pixels HALF size: 160x120 pixels	*	1/14	HALF	3KB	180

Conversion rules	DCF Ver. 1.0 – compliant	
Pickup elements	1/18” CCD sensor (3.2 Megapixels)	
Sensitivity	Equivalent to ISO 100/200/400	
Lens	2.8X optical zoom lens F2.9 –F4.8	
Focal length	F=7.25mm–20.3mm(equivalent to 35mm–100mm on a 35mm camera)	
Viewfinder	Real image type zoom finder	
Auto-focus	TTL system AF, focus adjusting range: approximately 0.10 m (0.33 ft) to infinity (WIDE side setting) Detection system: Contrast detection system (frame rate during detection: 30 Hz)	
Exposure control	Metering system	Spot metering, multi metering
	Control system	Program AE , aperture-priority AE, shutter-priority AE
	Exposure compensation	–2.0 EV to +2.0 EV (in 0.5 EV increments)
Shutter speed	1/2 to 1/1,000 sec. (mechanical shutter)	

White Balance	Auto selected Manual setting possible (5 modes)	
Focal range	Standard	0.5m to infinity
	Macro	0.10m (WIDE) to infinity
Self-timer	2 seconds/10 seconds selectable	
Flash	Modes	Auto, Red-eye reduction forced flash, Forced Flash, Suppressed Flash
	Effective range	0.25m ~ 2.5m
Date/Time	Simultaneously recorded to image data (Exif file format)	
LCD monitor	1.6” TFT (60K pixels) (280x220 pixels)	
I/O terminal	DC IN terminal	DC 5V
	DIGITAL terminal	USB
	VIDEO terminal	NTSC or PAL system
Power Supply	4 x AA (Alkaline, Nickel Metal Hydride or Lithium) battery or AC adapter (PDR-AC20) (sold separately)	
Camera dimensions	115.5mm(W) x 69.2mm(H) x 46.1.mm(D)	
Weight	230g	

* The LCD monitor on your digital camera is manufactured using advanced high-precision technology. Though fine spots may appear on the LCD monitor, this is not a malfunction. The LCD monitor can be used as it is.

AC adapter spec.

AC adapter (PDR-AC20A)

Power supply	AC120V 50/60Hz
Rated Input Capacity	18VA
Rated Output	DC5V 1.5A
Operating temperature	0°C (+32°F) ~ +40°C (+104°F)
Storage temperature	-10°C (+14°F) ~ +70°C (158°F)
Dimensions	48 mm (1-8/9") (W) x 26 mm (1-1/4") (H) x 70 mm (2-3/4") (D)
Weight	Approx. 100 g (3.5 oz)
Connector Cable Length	Approx. 2 m (6.6 ft)

AC adapter (PDR-AC20E)

Power supply	AC230V 50Hz
Rated Input Capacity	120 mA
Rated Output	DC5.0V 1.5A
Operating temperature	0°C ~ +40°C
Storage temperature	-10°C ~ +70°C
Dimensions	49.5 mm (1.9") (W) x 66.5 mm (2.6") (H) x 76 mm (3.0") (D)
Weight	Approx. 130 g (4.5 oz)
Connector Cable Length	Approx. 2 m (6.6 ft)

AC adapter (PDR-AC20U)

Power supply	AC230V 50Hz
Rated Input Capacity	120 mA
Rated Output	DC5.0V 1.5A
Operating temperature	0°C ~ +40°C
Storage temperature	-10°C ~ +70°C
Dimensions	49.5 mm (1.9") (W) x 60.5 mm (2.4") (H) x 76 mm (3.0") (D)
Weight	Approx. 130 g (4.5 oz)
Connector Cable Length	Approx. 2 m (6.6 ft)

These specifications are subject to change without notice.

Warnings and Messages Displayed on LCD Monitor

The following warnings, messages and icons are displayed on the LCD monitor and the status display.

Display LCD monitor	Meaning
	Batteries are partially used.
	Battery power is nearly exhaustion.
	Batteries are completely exhausted. Camera will not turn on.
CARD ERROR	The SD Memory Card is damaged. An unsupported SD Memory Card is loaded
CARD LID OPEN	The battery cover not on the lock position.
CARD FULL	No more space on the SD Memory Card Recording is not possible.
NO CARD	No SD Memory Card is loaded. SD Memory Card is loaded incorrectly.
CARD ISNíT FORMATTED	The SD Memory Card is not initialized. The SD Memory Card format is incorrect.
FORMAT CARD?	The SD Memory Card is not formatted (initialized). The SD Memory Card format is incorrect.
FRAME NUMBER FULL	The frame number has reached 999-9999.
PROTECTED	The image is write-protected.
NO IMAGE	The image to apply the quality or other function does not exist.
CARD FULL	There is not enough space on the SD Memory Card to copy image data to.
FORMAT ERROR	The format of the SD Memory Card to copy image data to is incorrect.

CARD PROTECTED	The SD Memory Card is write-protected.
FOLDER ERROR	There are no free folders on the SD Memory Card to copy image data to.
RECREATE DPOF FILE?	There is a parameter that is not supported in the DPOF setting file.
FRAME NUMBER FULL	The maximum number of images (999 frames) that can be set is exceeded when setting DPOF setting files.
NO IMAGE AVAILABLE	No images are recorded to the SD Memory Card
DPOF ERROR	There is a parameter that is not supported in the DPOF setting file.
DPOF PROTECT OFF	This is a confirmation for checking whether or not to remove DPOF write-protection when clearing DPOF settings.
	You tried to play back an image not supported on this camera.
ERROR ***	A camera problem has occurred. Contact a Support Center.
	Poor lighting conditions. Image will be vulnerable to vibrations.
TOO MANY IMAGES	Image files is over 16348 pieces.
THIS CARD CAN'T NOT BE USED	Existing SD Memory Card capacity is over 256 MB.

Troubleshooting

Problem	Causes	Remedy
No power supply	The batteries are exhausted.	Replace with new batteries.
	The AC adapter plug has come out from the power outlet.	Plug the adapter back in.
The camera turns OFF during operation	The batteries are exhausted.	Replace with new batteries.
The battery runs out quickly	You are using the camera in extremely cold conditions.	Put the battery in your pocket or another warm place to heat it and then load it into the camera just before you take a picture.
	The terminals are dirty.	Wipe the battery terminals with a clean, dry cloth.
	The battery has reached its effective life.	Replace with new batteries.
No photograph is taken when the shutter button is pressed	No SD Memory Card is loaded	Load SD Memory Card.
	The SD Memory Card is loaded incorrectly.	Load the SD Memory Card correctly.
	Not enough space on the SD Memory Card .	Load a new SD Memory Card. Erase photograph images or change the size and quality to increase space on the SD Memory Card.
	The SD Memory Card is write-protected.	Remove the write-protection or replace with a new SD Memory Card.
	The SD Memory Card is not formatted.	Format the SD Memory Card.
	The SD Memory Card is damaged.	Load a new SD Memory Card.
	The Auto Power OFF function is activated.	Turn the power on again
I cannot use the flash to take pictures	The mode dial has been changed to another setting..	Set the mode dial to the correct setting.
	The flash is set to Suppressed Flash mode	Set the flash to Auto, Red-eye reduction or Forced flash mode.
	You pressed the shutter button while the flash was charging.	Wait until charging is completed before pressing the shutter button
The flash will not charge	The camera is set to Suppressed Flash mode.	Set the flash to Auto, Red-eye Reduction or Forced Flash mode.
	The batteries are exhausted.	Replace with new batteries
The playback image is too dark even though I used the flash	The subject is too far away.	Move closer to the subjects. (about 0.8m ~ 3.0m- WIDE setting)
The playback image is blurred	The lens is not clean	Clean the lens.
	The image is out of focus	Set the FOCUS photography according to the distance up to the subject.
I cannot format the SD Memory Card	The SD Memory Card is write-protected.	Remove the write-protection.
I cannot erase all the frames.	The frame is protected.	Remove the write-protection. Cancel the DPOF setting.
	The SD Memory Card is write-protected.	Remove the write-protection.
Nothing happens when I use the buttons and switches	Camera malfunction	Turn the power off and remove the batteries once, and try again.
	The mode dial is not at the correct position.	Set the mode dial to the correct setting.
	The camera is in the Auto Power OFF mode.	Press the POWER button again to turn the camera on.
Nothing is displayed even through the LCD monitor is set to ON.	The camera is in the PC mode.	Change the camera to the photography or playback mode.
The set date and time disappears.	Both the battery and AC adapter are removed with the power still on.	Set the date and time again.

Glossary

●AF/AE
AF (auto-focus) ··· A function for automatically focusing your camera.
AE ··· A function for automatically setting your camera's exposure.
AF/AE lock ··· Locking of the focus and exposure settings.

●DPOF (Digital Print Order Format)
A standard for directly writing print information to the SD Memory Card. Files in this format can be printed easily by printers or photo print service bureaus that support this format.

●DCF (Design rule for Camera File System)
A file system standard defined by the JEIDA (Japan Electronic Industry Development Association) that is required for exchanging data between digital still cameras or a digital camera and a printer. This standard defines the hierarchy and file names used when storing image files on memory cards or other recording medium.

●Exif File Format (Exchangeable Image File Format)
A color still image format for digital still cameras approved by the JEIDA (Japan Electronic Industry Development Association). JPEG-compliant, this format is compatible with TIFF and JPEG and can be used in image processing software for most personal computers.

●JPEG
A file format used for compressing and saving color images. The compression ratio can be selected, but the higher the compression ratio, the worse image quality becomes. This format is widely used in the paint software for PCs and on the Internet.

●NTSC (National Television System Committee)
Method of television transmission in use in Japan and North America.

●PAL (Phase Alternate Line)
Method of television transmission in use in the United Kingdom, Germany and other western European Countries

●PC Card
A generic term for cards that meet the PC Card Standard.

●Red-Eye Effect
The phenomenon where people's eyes sometimes appear red in the picture when you use a flash to photograph them in low-light conditions. This is caused by the light of the flash reflecting off the inside of the eye.

●White Balance
When the brightness of the light changes, the human eye adapts so that a white object still looks white. On the other hand, devices such as digital still cameras see a white subject as white by first adjusting the balance to suit the color of the ambient light around the subject. This adjustment process is referred to as matching the white balance.

●SD Memory Card
The Secure Digital (SD) Memory Card is a flash memory storage device designed by the consortium of Matsushita Electronic (Panasonic), SanDisk and Toshiba to meet the security, capacity, performance and environmental requirements inherent in emerging audio and video consumer electronics devices. This recording medium can be used over and over again.

●Formatting
Transforming the contents of the SD Memory Card to a recordable state. (This is sometimes called "initialization".)

●Exposure Compensation
When the screen contains an extremely bright or dark object, the camera automatically adjusts the brightness, resulting in the subject being reproduced darker or lighter. Exposure compensation adjusts for this.

●PRINT Image Matching
The PRINT Image Matching system prints the image of a digital still camera (with PRINT Image Matching function) in high quality using a PRINT Image Matching compatible printer.
When taking a photograph, the image data is added with PRINT Image Matching print command which enable the printer to print in an optimum color.

Global contacts

Country /Region	Company name	Phone number	e-mail	Website
Canada	Toshiba America Information Systems, Inc.	(800) 829-8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd
China Hong Kong	Toshiba Hong Kong Ltd.	2956-0222	NA	www.toshiba.com.hk
France	Toshiba Systems (France)	01 47 28 28 50	consommateur@toshiba-tsf.com	www.toshiba.fr/produits/video/index.htm
Germany	Toshiba Europe Gmbh	(02131) 158 01	consumer@toshiba-teg.com	www.toshiba.de/consumer
Italy	Toshiba Consumer Products (Italia)	(039) 6099342	toshiba.italia@toshiba-tuk.com	www.toshiba.it/
Singapore	Toshiba Singapore Pte.	270-7776	NA	www.cp.toshiba.com.sg
Switzerland	Toshiba Europe Gmbh Swiss Branch	01-946 07 77	info@toshiba.ch	www.toshiba.ch/
United Kingdom	Toshiba (UK) Ltd.	(01932) 828828	enquiries@toshiba-tuk.com	www.toshiba.co.uk
United States	Toshiba America Information Systems, Inc.	800) 829-8318	dsc.support@tais.toshiba.com	www.toshiba.com/taisisd

For customers in the U.K.
Website for digital cameras: www.toshiba.co.uk
Technical support is available on-line, or by calling (0115) 9766958.
9.00am to 5.00pm Monday to Friday except bank holidays,
or e-mail us at: enquiries@toshiba-tuk.com

Toshiba European Service Centre
Units 6&7 Admiralty Way, Camberley, Surret, GU15 3DT, U.K.

For customers in the U.S.A. and Canada
Register your product on-line at www.toshiba.com/taisisd
Technical support is available on-line, or by calling (800) 829-8318.
8:00 a.m. to 5:00 p.m. EST, Monday to Friday except holidays,
or e-mail us at: dsc.support@tais.toshiba.com

Toshiba America Information Systems, Inc.
Imaging Systems Division
9740 Irvine Boulevard, Irvine, California 92618-1697

* Address and telephone number are subject to change without notice.
* For customers outside of Canada, U.K. and the U.S.A., please refer to the “Global Contacts” before this page and contact the nearest Toshiba company for assistance.